

## Executive Summary

Chinese immigration into Massachusetts has increased rapidly in the last two decades. Today, Chinese-speaking residents comprise the largest linguistic minority in Brookline. With these facts in mind, the Department of Public Health, under the direction of Alan Balsam, Director, in cooperation with Boston College, initiated a community health assessment of the Chinese-speaking elderly population in the Brookline area. In 2000, a group was formed with representatives from both Boston College and the Brookline Department of Public Health. This group interviewed 177 Chinese-speaking elderly immigrants residing in Brookline. The goal of the interviews was to gather information on the health status and health care needs of this population.

Data presented in this document describe the sociodemographic characteristics, self-reported health status, health related behaviors and needs of this growing elderly population. These data provide valuable information to be used for program development for this population in Brookline. It will also provide a baseline from which to measure progress over time.

### **Major findings from this report are:**

- ? ? 66% of the Chinese-speaking elderly households had yearly incomes under \$10,000. Ninety-one percent (91%) of the respondents living alone had incomes lower than \$10,000;
- ? ? 27% have a college or advanced degree;
- ? ? 76% of the Chinese-speaking immigrants receive some financial support from the government such as Social Security Income or other cash benefits;
- ? ? 51% of the Chinese immigrants receive Medicaid, and 64% receive Medicare. Thirty-two percent (32%) of the respondents have dual eligibility;
- ? ? Less than 10% rated their ability to speak, read, understand, or write in English as “well” or “very well”;
- ? ? 57% of the Chinese immigrants experienced language difficulties when using health care services;
- ? ? 38% had a scheduled visit to a health care provider in the preceding month;
- ? ? 19% of the respondents scored as “depressed” on the Center for Epidemiological Studies Depression Scale (CES-D), yet no one admitted seeing a psychiatrist;
- ? ? 38% reported using herbal medicine. The percentage of respondents using home remedies, chiropractics, and acupuncture was 6%, 6%, and 4% respectively;

? ? 28% used food for medical treatment;

? ? 6% of the respondents reported that they currently smoke; 27% smoked in the past;

? ? 8% of the respondents reported drinking alcohol on a regular basis (2-3 times a week or more); and

? ? 81% of the Chinese immigrants reported doing exercise regularly, (2-3 times a week or more). Walking, Tai Chi and other types of Chinese exercises, are the most popular types of exercise.

## Acknowledgments

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## Introduction

The **Healthy Brookline** series is designed to present data on the health status and risk factors of Brookline residents. *Volume V* focuses on the population of elderly Chinese-speaking immigrants.

According to the 1990 census, there were about 6,750 Asian and Pacific Islanders over the age of 60 living in the Greater Boston area. Most of these were Chinese-speaking elderly immigrants. Since 1990, the number of Chinese immigrants has increased rapidly. Based on the 2000 census, there are 264,814 Asians in Massachusetts, an 86.3% increase from 1990. In Brookline, the census identified 7,874 Asians, a 72.1% increase from 1990. Again, as in 1990, a large percentage were Chinese-speaking.

Ethnic Chinese in the U.S. emigrated from many different areas in Asia, such as Mainland China, Taiwan, Hong Kong, Vietnam, Malaysia, and Singapore. The majority of Chinese immigrants in Boston came from Mainland China, Taiwan, and Hong Kong. Before 1980 the Chinese concentrated in Boston's Chinatown. However, in the past two decades, an increasing number of Chinese immigrants settled in the Greater Boston area.

The first step in analyzing this population of Chinese immigrants consisted of qualitative interviews. These included 12 in-depth interviews, and one focus group with 12 respondents. Based on these qualitative interviews, an original survey was designed and administered to 177 Chinese-speaking elderly immigrants residing in Brookline. These immigrants were identified through Chinese service agencies, elderly housing units, and personal contact. This report is designed to present data on the health status and health care needs of this elderly population.

The findings from the study follow. Explanations precede all charts and tables.

## **Sociodemographic Characteristics**

This section provides some important sociodemographic characteristics of the Chinese – speaking elderly immigrants residing in Brookline. These characteristics include age, income, gender, marital status, education, occupation and rates of current employment. Data are also presented on health insurance, Medicare and Medicaid status, reliance on Government support programs, and housing arrangements. As with every immigrant group, information on rates of naturalization, immigration status, length of stay in the U.S., country of origin, dialect spoken at home and English language proficiency, are important in understanding the particular problems and challenges that face Chinese-speaking elderly immigrants.

### ***Age Distribution***

Age is an important indicator of people's potential health status and health care needs. The age of respondents in this study ranged from 53 to 99 years, with an average age of 72 years. Nineteen percent, 19%, of the respondents were aged 75 years and above. It is helpful to indicate the proportion of the very old in this population in order to predict the prevalence of chronic disease and need for long term care. It is important to note that this sample excluded individuals who were cognitively impaired and institutionalized and may not represent the general population of Chinese-speaking elderly immigrants.



Figure 1: Age Distribution of the Chinese-Speaking Elderly Immigrants

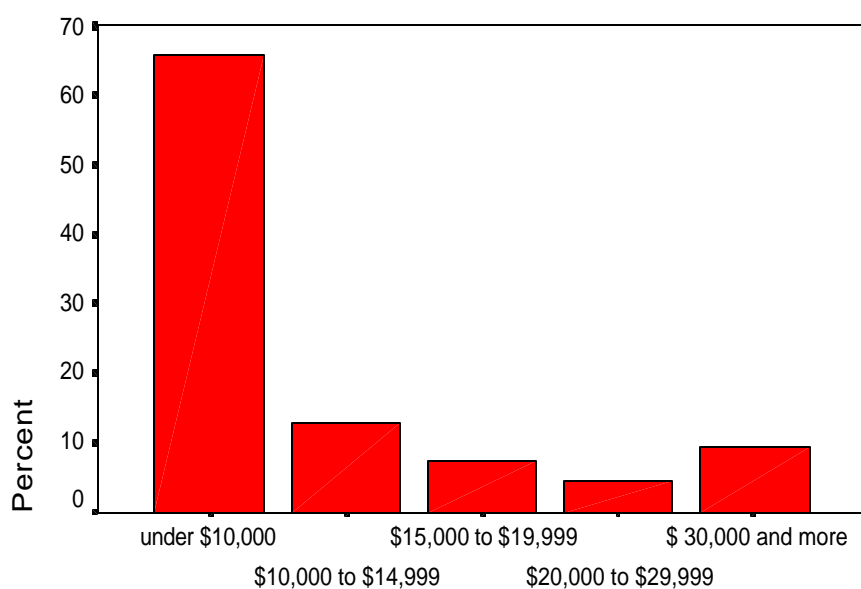


### *Income Distribution and Living Arrangement*

In this part of the study, only 166 of the 177 participants responded to the income question. Sixty-six percent (66%) of those that responded had yearly family incomes under \$10,000; 20 respondents (12%) had yearly incomes between \$10,000 and \$14,999, 8% had incomes between \$15,000 and \$19,999, 4% had incomes between \$20,000 and \$29,999, and 9% had incomes of \$30,000 and above. It is important to note that this income distribution does not include such in-kind benefits as rent subsidies and food stamps.

Forty-eight and a half percent, (48.5%) of the respondents live with their spouses; 20.9% live with their children, grandchildren, or other people; and almost a third of them (30.5%) live alone. One of the explanations for the relatively large percentage of elderly living with their children may be that three-generation households were popular in Chinese traditional society. Another explanation may be that respondents with low-income levels can have increased access to health care when they are living with family.

**Figure 2: Household Income Distribution  
for 1999-2000**



### INCOME

The vast majority of those living alone had incomes much lower than those not living alone. Ninety-one percent (91%) of the respondents living alone had incomes lower than \$10,000. Fifty-four percent of the respondents living with a spouse had incomes lower than \$10,000. Fifty-four percent (54%) of those living with children, grandchildren, or others, also had incomes lower than \$10,000.

**Table 1**

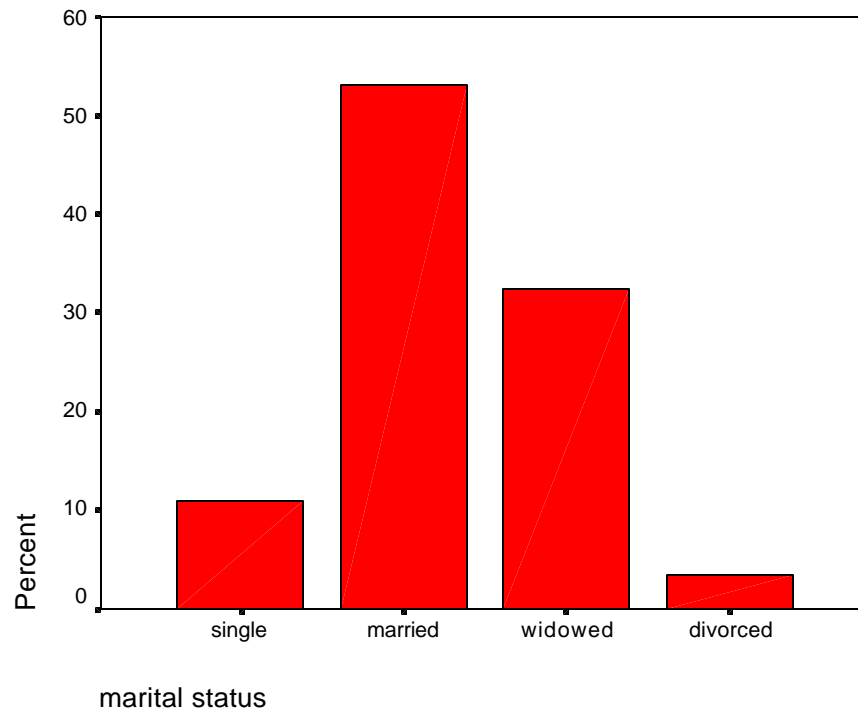
### Living Arrangement and Income Distribution

Household Income Distribution Per year	Number of Individuals per Household					Total
	Alone	With Spouse	With Children or grandchildren	With spouse and Children or grandchildren	With Others	
Under \$10,000	43	45	13	5	4	110
\$10,000 to \$14,999		14	4	2		20
\$15,000 to \$19,999	4	7	3			14
\$20,000 to \$29,999		6	1			7
\$30,000 and above		12	3			15
Total	47	84	24	7	4	166

### ***Gender and Marital Status***

Sixty-one percent (61.7%) of the respondents were female, and 38.3% were male. This is consistent with the gender distribution of the general elderly population in Massachusetts. The marital status distribution of the sample reveals that 53% are married or living with a partner, 32% are widowed, 11% are single or never married, and 4% are divorced. The percentage of single or never married is surprisingly high. This is partially due to immigration history. The Immigration Exclusion Act of 1882 severely restricted Chinese immigration. It banned the immigration of Chinese women, even preventing Chinese men already here from bringing their wives and families to join them. Although this Immigration Act ended in 1965, it had far reaching impacts on the demographics of the Chinese community. As a result, many Chinese elderly immigrant men remain single or childless.

Figure 3. Marital Status



### ***Educational Attainment and Occupational Status***

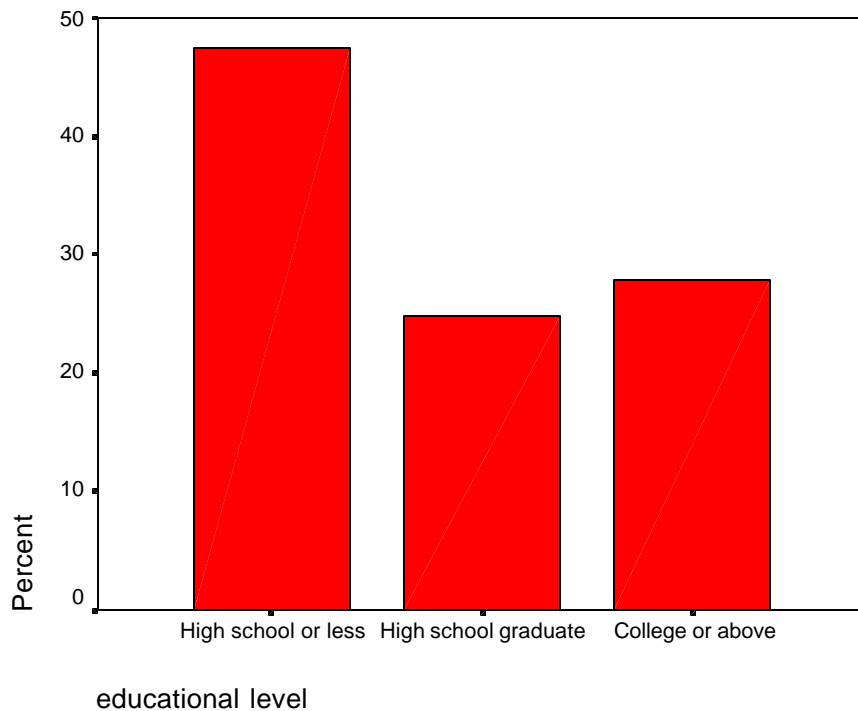
Figure 4 describes the educational attainment of the respondents. Forty-eight percent (48%) had achieved a high school education or less. The following is a breakdown of categories in terms of educational attainment:

? ? 48% less than high school ;

? ? 25% high school graduate; and  
? ? 27% some college or above.

The sample of respondents included 1 doctor, 1 accountant, 2 engineers, 2 researchers, and 13 teachers as professionals. Other occupations were cook, barber, housekeepers, and manual laborers, etc.

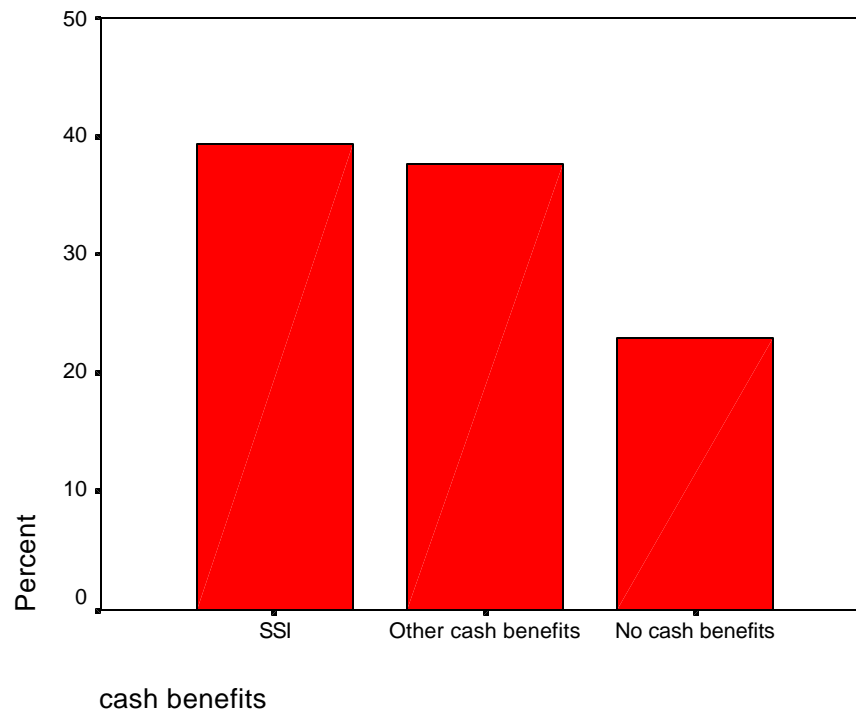
Figure 4: Educational Attainment



### ***Government Support Programs for the Elderly***

Most of the Chinese-speaking immigrants in the study receive some financial support from the government. Thirty-eight percent (38%) of the participants receive Supplemental Security Income (SSI). This is a means-tested program designed to provide an income safety net for indigent persons 65 years and over, disabled, or blind. Thirty-seven percent (37%) of the respondents receive other cash benefits. Twenty-four percent (24%) of the respondents receive no cash benefits at all. Some reasons for this large percentage of respondents receiving no benefits are ineligibility due to income level; a complicated application process; and a lack of awareness of the existence of these support programs. Most of the respondents in this study were contacted through Chinese service agencies and informed about support programs and may receive more governmental support than the general population.

Figure 5: Percentage Receiving Cash Benefits



### ***Medicaid and Medicare Recipient***

A large percentage of the Chinese immigrants (51%) receive Medicaid, and 64% receive Medicare. Thirty-two percent (32%) of the respondents have dual eligibility, with Medicaid covering Medicare deductibles and co-payments. Ten percent (10%) of the respondents buy supplemental private health insurance like MediGap. In our study, only Medicare recipients, not Medicaid recipients, buy private health insurance.

Figure 6: Percentage of Chinese Elderly  
Receiving Medicare

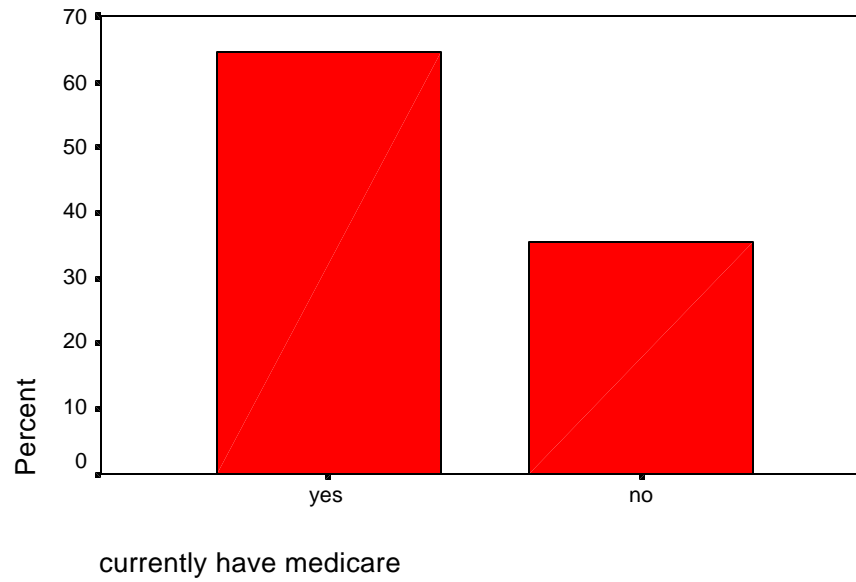
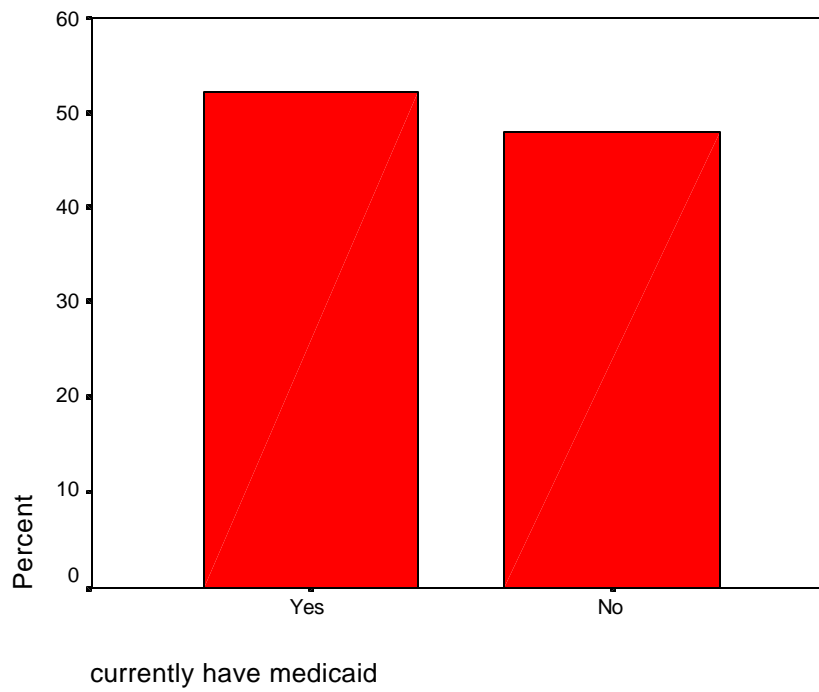


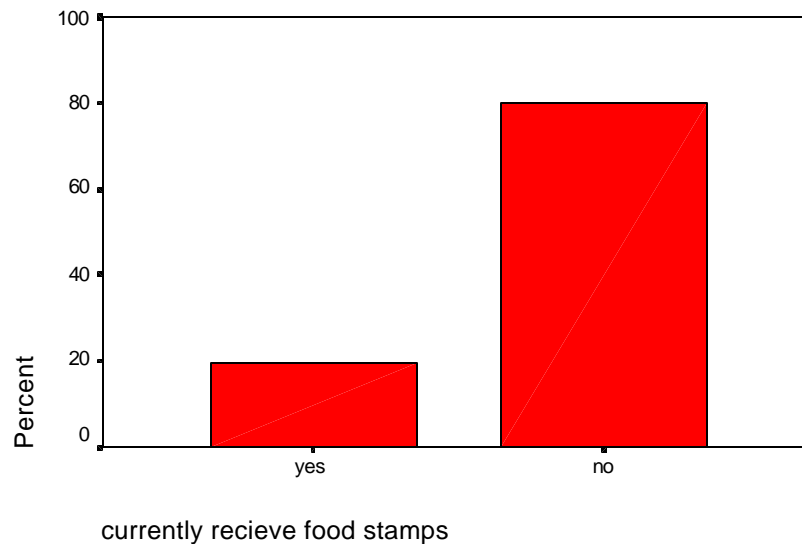
Figure 7: Percentage of Chinese Elderly  
Receiving Medicaid



### ***Food Stamps***

Receipt of Food Stamps is another indicator of the need to access outside resources to meet nutritional needs. Although the majority of respondents have very low household incomes, only 20% of them receive Food Stamps. It is possible that many new older immigrants are not eligible to apply for this program. Some respondents may be reluctant to receive Food Stamps because of the perceived stigma associated with receiving them. It is also possible that some respondents do not know they are eligible for this program.

Figure 8: Percentage of Chinese Elderly  
Receiving Food Stamps



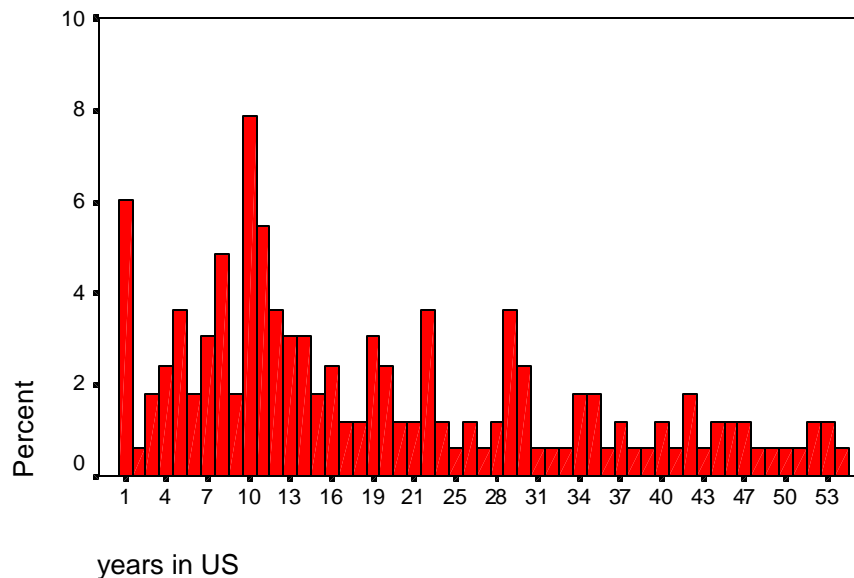
### ***Length of Stay in the United States***

Chinese immigration to the U.S. began at the end of the 19th century. Boston's Chinatown was established in the early 20th century. However, the number of Chinese immigrants in Boston has increased dramatically over the last two decades. This is consistent with the results from the U.S. Census that show that there has been a dramatic increase of Asian immigrants to the U.S. since 1980, with an even greater increase since 1990.

In this study, 62% of the respondents immigrated to the U.S. within the last 20 years. Thirty-four percent (34%) of the respondents were recent immigrants who arrived in the U.S. over the past 10 years or less. The average length of stay in the U.S. is 19 years, with a range of a few months to 68 years. The short length of stay of some of the

immigrants can affect their eligibility for many Federal support programs. The length of stay in the United States varies a great deal among the respondents due to the long history of Chinese immigration to the U.S.

Figure 9: Chinese Elderly Immigrants' Years of Stay in the U.S.



### *Country of Origin and Dialect Spoken at Home*

Chinese immigrants are not a homogeneous group. They came to the U.S. from many different countries and areas. In Boston, the majority of the Chinese immigrants came to the United States from Mainland China, Taiwan, and Hong Kong. A few came from other countries such as Singapore, Vietnam, and Malaysia. The political, social, and economic characteristics of a person's country of origin may be significant in determining the kind of services that are needed. In our study:

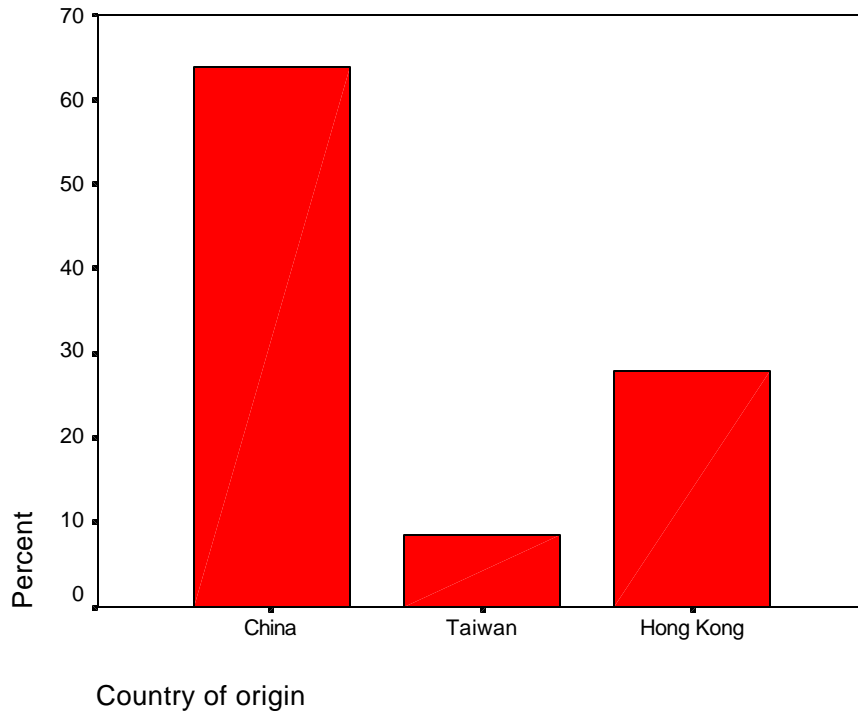
- ? ? 62% of the respondents were from Mainland China;
- ? ? 29% were from Hong Kong; and
- ? ? 9% were from Taiwan.

Chinese respondents speak various dialects at home. In this survey:



? ? 36% speak Cantonese;  
 ? ? 16% speak Mandarin;  
 ? ? 18% speak Taoshanese;  
 ? ? 15% speak both Cantonese and Taoshanese;  
 ? ? 8% speak both Mandarin and Cantonese;  
 ? ? 3% speak Cantonese, Mandarin, and Taoshanese;  
 ? ? 3% speak various different dialects/languages (1 speaks both Taoshanese and Taiwanese, one speaks Cantonese, Mandarin, Taoshanese and English, and 3 speak other dialects); and  
 ? ? 1% speak Taiwanese.

Figure 10: Country of Origin



### ***Naturalization***

Currently, a non-citizen permanent resident can still apply for Medicaid in Massachusetts. However, becoming a US citizen is a way to receive many other governmental supports such as SSI, Food Stamps, and other benefits. Among the 163 respondents who answered this part of the survey, 64% are naturalized U.S. citizens, and 36% are not U.S. citizens.

## ***Housing***

More than half (55%) of the Chinese-speaking elderly immigrants in the study live in some kind of subsidized housing. Forty-seven percent (47%) of respondents reported living in subsidized housing for the elderly. Chinese service agencies and some elderly housing units contacted many of the respondents. Therefore, in this study, the percentage of elderly in subsidized housing units could be higher than the general population of Chinese elderly immigrants.

The majority of the respondents surveyed are satisfied with the current living arrangement and living conditions. Specifically:

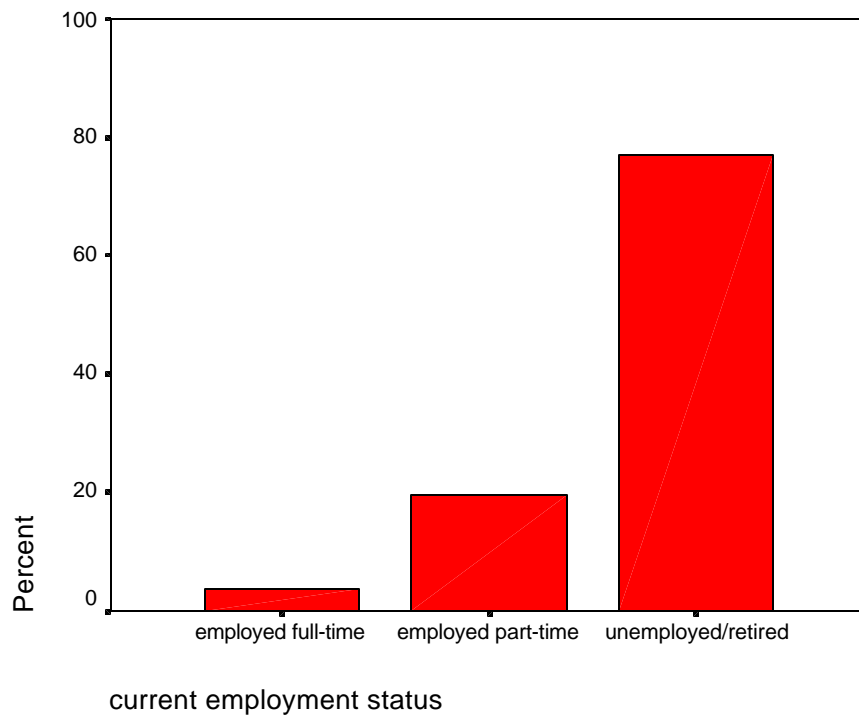
- ? ? 16% are extremely satisfied;
- ? ? 55% are satisfied;
- ? ? 18% are moderately satisfied;
- ? ? 6% are not very satisfied; and
- ? ? 5% are not satisfied.

Some of the elderly, who do not currently reside in subsidized elderly housing, are on long waiting lists for apartments. They would like to reside in the elderly housing that has easy access to public transportation and is close to their children.

## ***Employment***

Not many Chinese-speaking elderly immigrants are currently employed. Only 3% of the respondents reported working full-time, and 20% are working part-time (including occasional work outside the home such as baby-sitting). Seventy-seven percent (77%) of the respondents reported that they were unemployed or retired. For many new immigrants, finding a job can be very difficult because of their advanced age and language barriers. Currently, many of the Chinese respondents are playing an active role in taking care of their grandchildren.

Figure 11: Current Employment Status



### ***Location of Family Members***

Chinese-speaking elderly immigrants usually reside in the same city as their adult children, and they keep close contact with their close relatives. Eighty percent (80%) of the respondents have close relatives in Boston or in the Boston Area. In addition, 76% have close relatives living in the U.S. outside the Boston area.

Figure 12: Relatives in the Boston Area

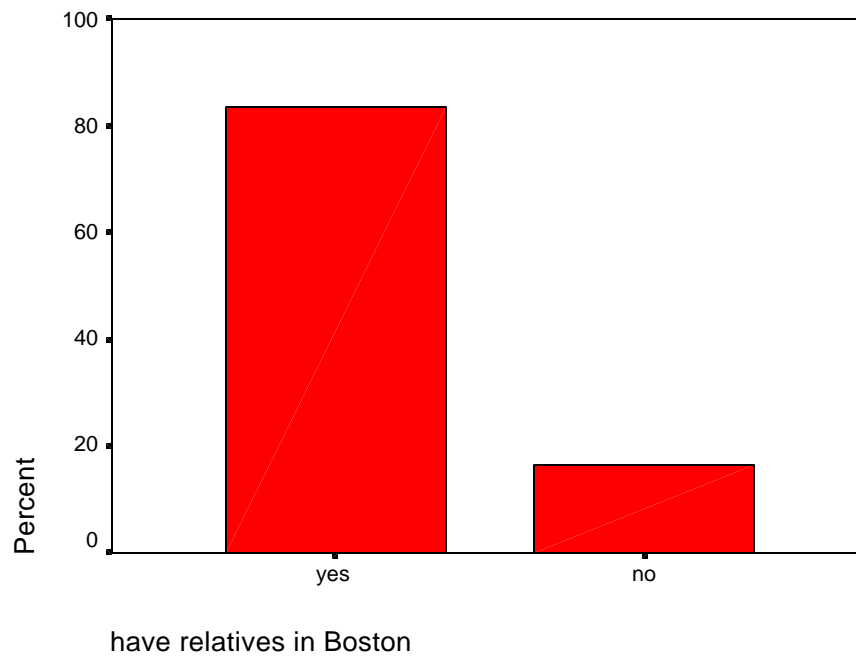
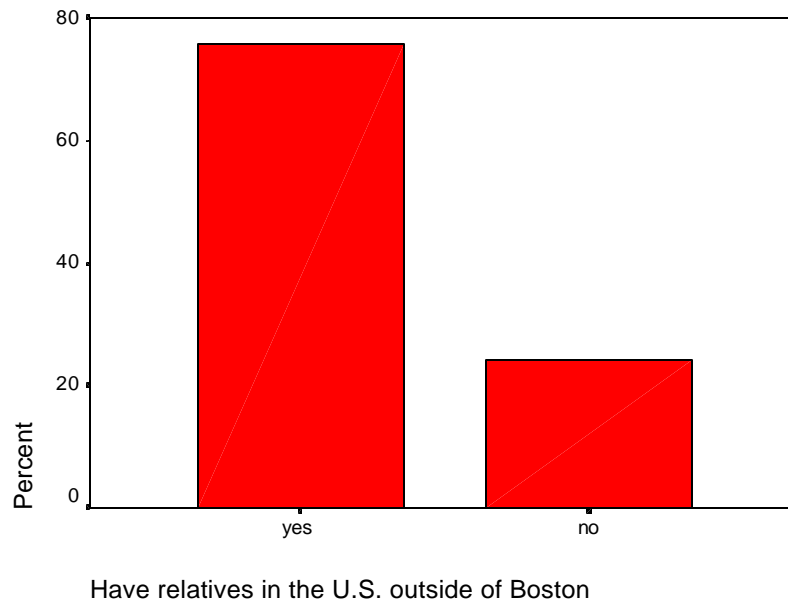
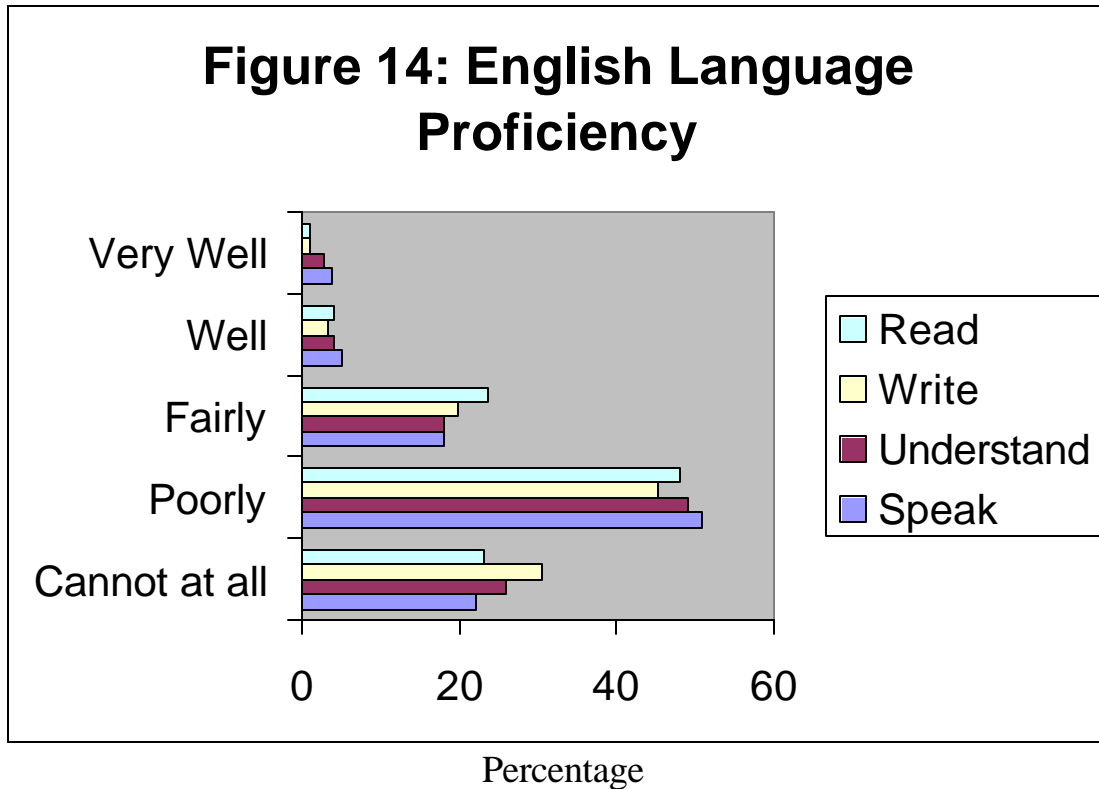


Figure 13. Relatives in the U.S.



### ***English Language Proficiency***

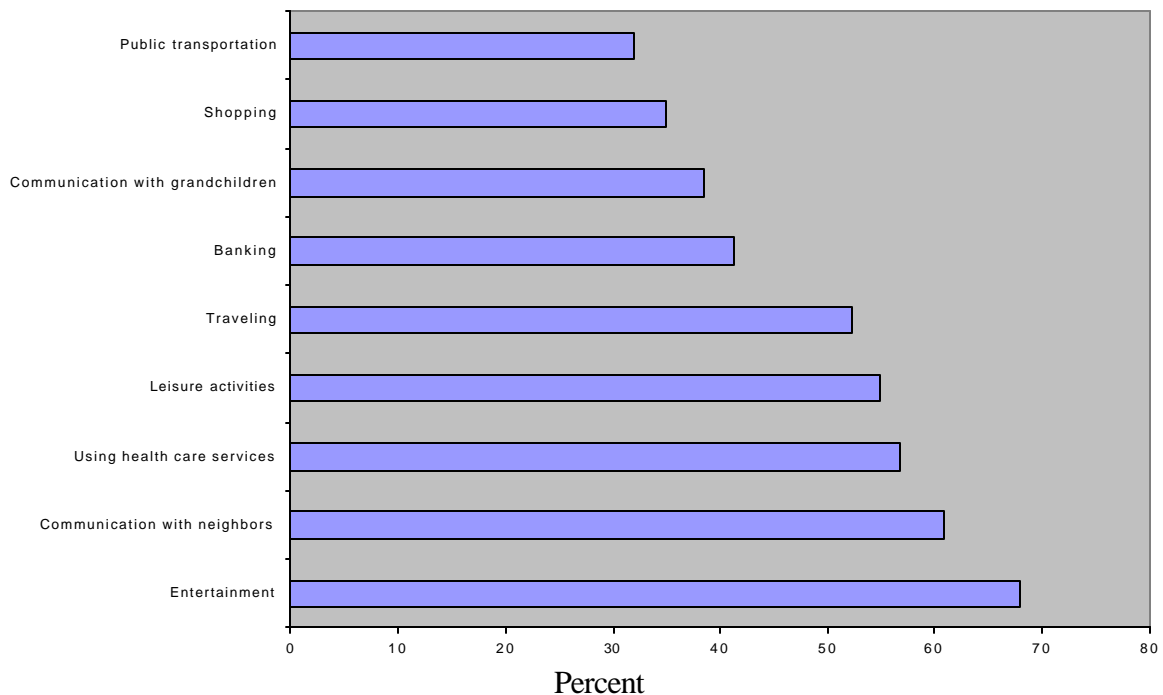
Limited knowledge of English is a major problem for Chinese elderly immigrants. Many of the respondents immigrated to the U.S. during their old age, and it is very difficult for them to master English as a second language. Less than ten percent (10%) rated their ability to speak English as “well” or “very well.” The majority rated their English language skills as “poor” or “can not read/write/understand/speak at all.”



### ***Limitations with English***

Respondents were asked whether their English language proficiency made their daily activities more difficult for them. Relatively lower percentages of respondents experienced language difficulties when shopping, banking or taking transportation. This is due to the availability of many Chinese immigrant-owned grocery stores and other businesses in the Boston area. The greater Boston area has good public transportation and taking public transportation may not require a high command of English. However, language difficulties have a greater impact on the respondent's use of health care services, leisure activities, and communications with the outside world. Fifty-seven percent (57%) of the elderly immigrants experienced language difficulties when using health care services.

**Figure 15: Daily Activities Affected by Language Limitations**



## Health Status Indicators

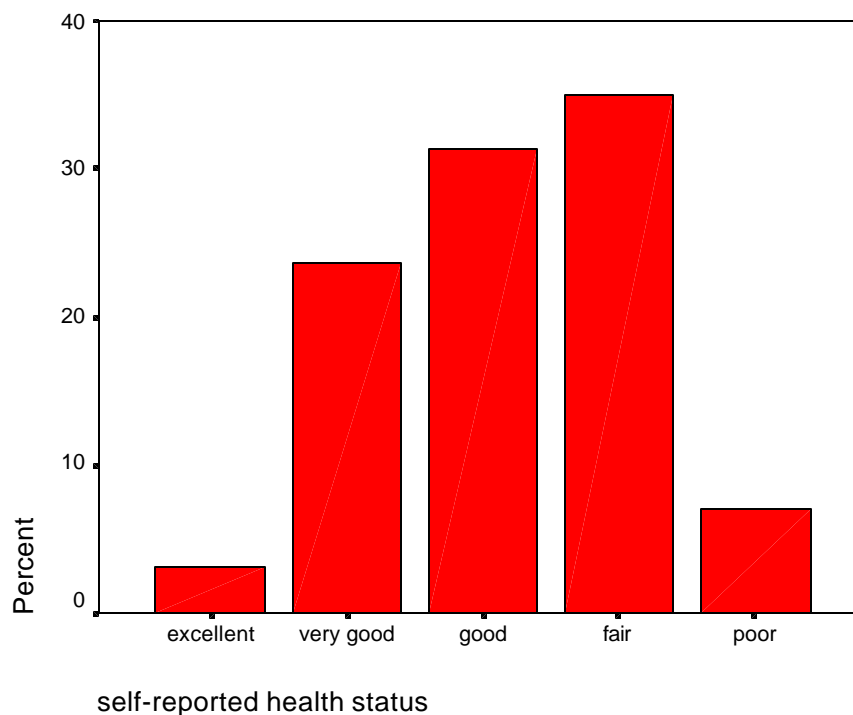
This section provides important health status indicators including self-reported health status, common health problems, physical limitations, and the need for help with Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). Data on social contact and quality of life measures are also presented.

### *Self-Reported Health Status*

Numerous studies have shown that self-rated health status is a strong indicator for health care needs and health service utilization. Few studies have been conducted to look at Chinese elderly immigrants' health status. The respondents in this study perceived their health as being worse than that of the U.S. Medicare population.<sup>7</sup> The results were:

- ? ? 4% reported their health as “excellent”;
- ? ? 23% reported their health as “very good”;
- ? ? 32% rated as “good”;
- ? ? 34% rated as “fair”;
- ? ? 7% rated “poor”.

Figure 16: Self-reported Health Status

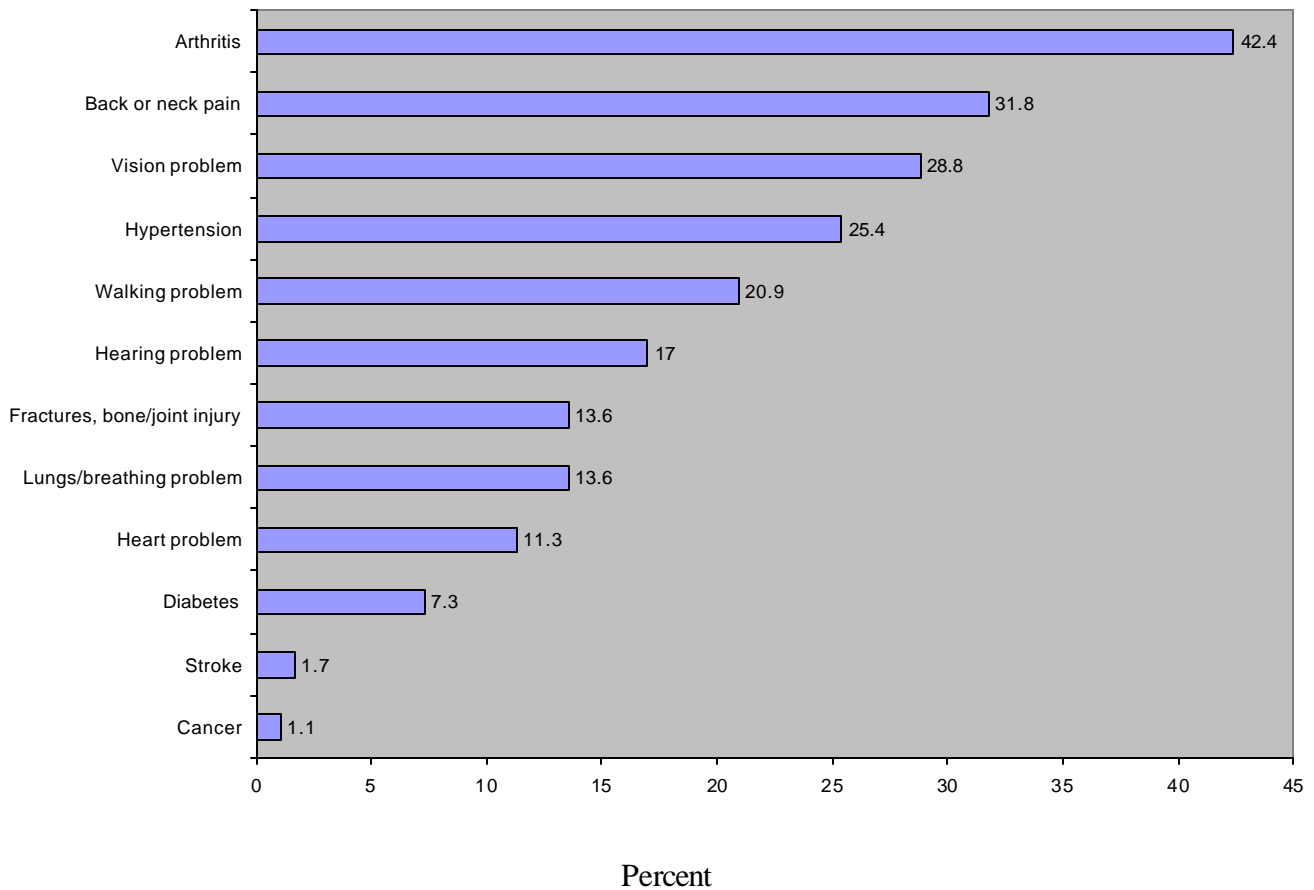


<sup>7</sup> National Center for Health Statistics. “Third National Health and Nutritional Examination Survey (NHANESIII) Phase I, 1988-9: Advance Data, Vital and Health Statistics of the Centers for Disease Control and Prevention.” Washington, DC: NCHS, 1994).

## Health Problems

As individuals age, they are more likely to experience health problems. Acute conditions become less frequent and chronic conditions become more prevalent. The most common chronic problem among the respondents is arthritis. Forty-three percent (43%) reported that arthritis limited their activities. Back/neck problems and eye/vision problems were the second and third, respectively, most common health problems that limited respondent's activities. According to the National Center for Health Statistics, the top three health problems for people in the U.S. are arthritis, heart disease, and hypertension. Arthritis, heart disease and hypertension are also common health problems among Chinese respondents. However, they may not see these problems as limiting their daily activities in the way that back or eye problems can.

**Figure 17: Percentage of Chinese Elderly with Various Health Problems**

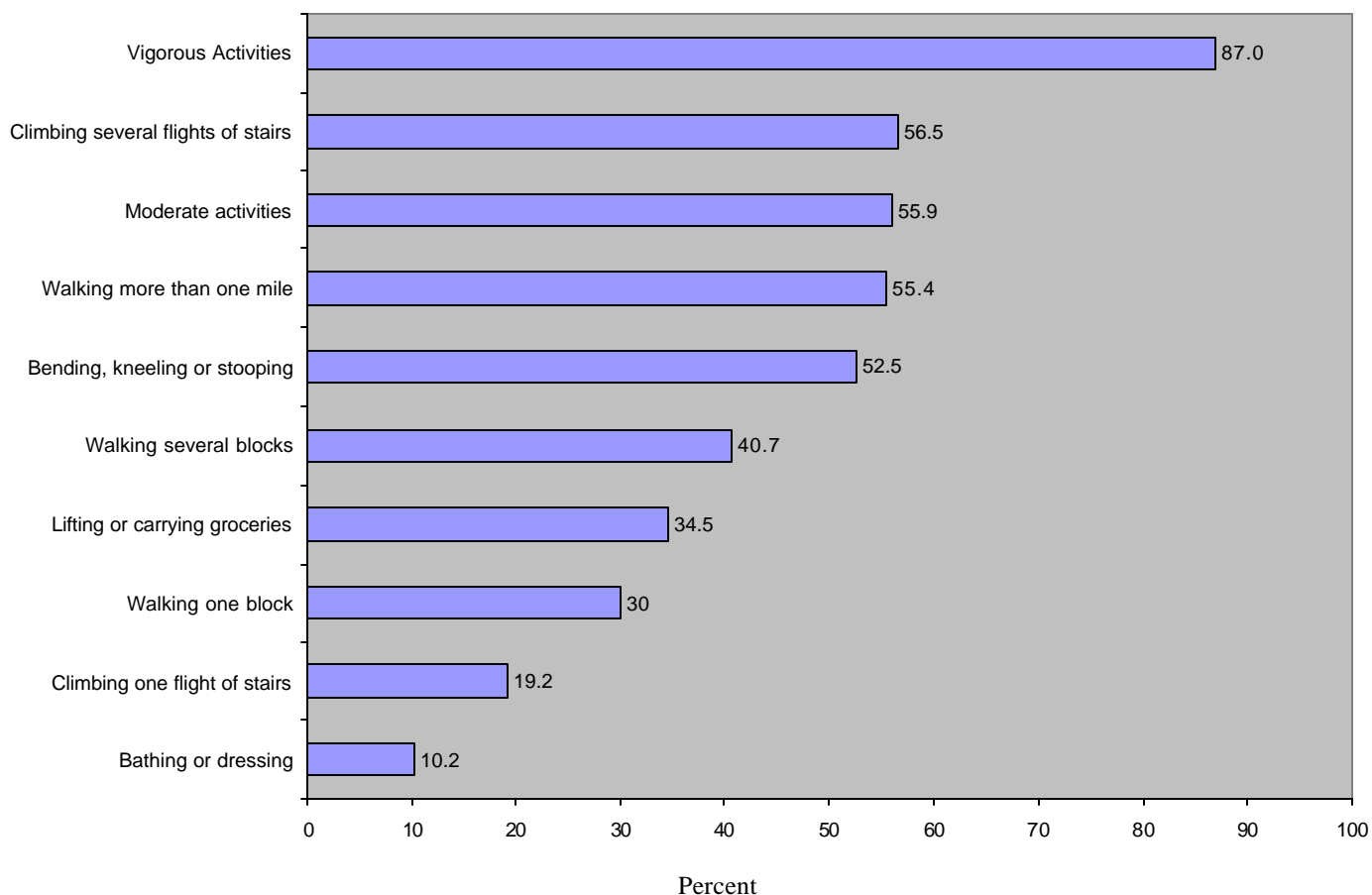




### ***Physical Limitations***

Respondents were asked about their physical limitations in performing certain kinds of physical activities. Vigorous activities were defined as running, lifting heavy objects and participating in strenuous sports. Moderate activities were defined as moving a table, pushing a vacuum cleaner, bowling, or doing Tai Chi. More than half of the respondents reported having difficulties in performing vigorous activities, moderate activities, climbing several flights of stairs, bending and walking more than one mile.

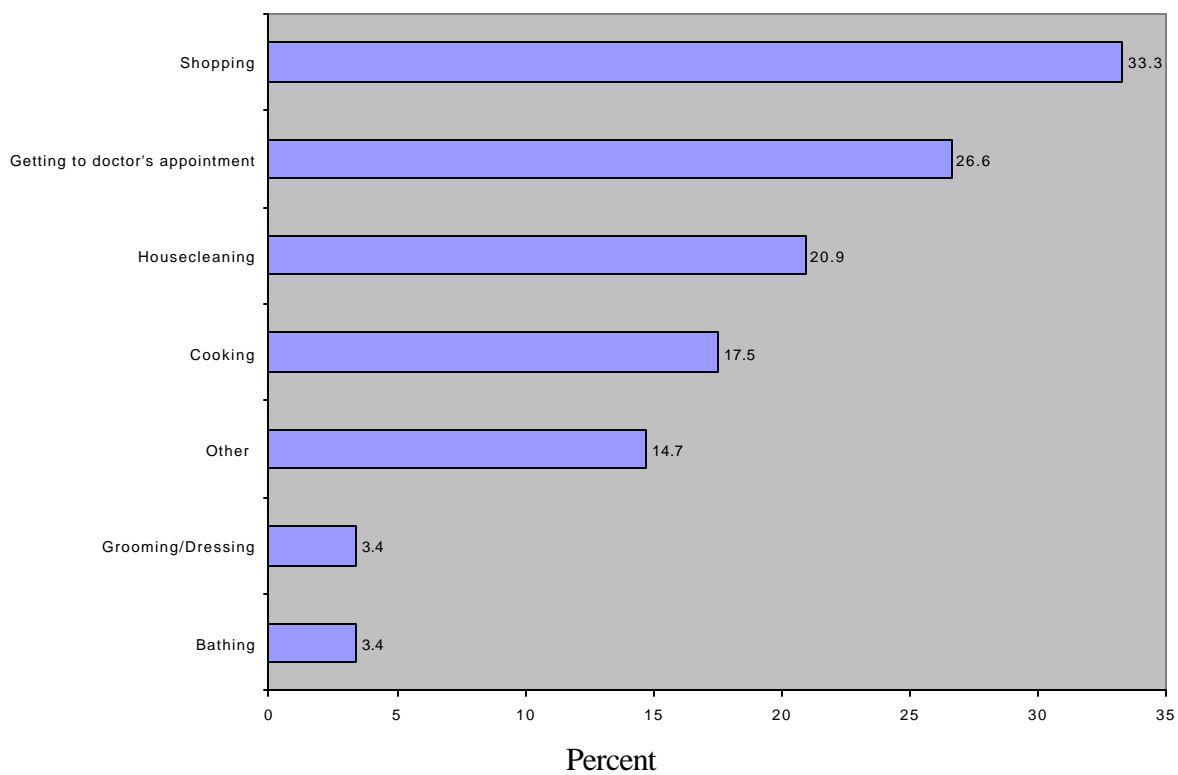
**Figure 18: Percentage of Respondents Listing Various Physical Limitations**



***Need for Help from Relatives with Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL)***

Respondents with health limitations may require help with basic Activities of Daily Living (ADL). Basic activities include bathing, grooming, dressing, and personal hygiene. Some respondents only need help with Instrumental Activities (IADL) such as cooking, shopping, housecleaning, and getting to doctor's appointments. Few respondents receive help with bathing (3.4%) and dressing or grooming (3.4%). A much larger percentage of the respondents receive help with shopping (33%) and getting to doctor's appointments (27%).

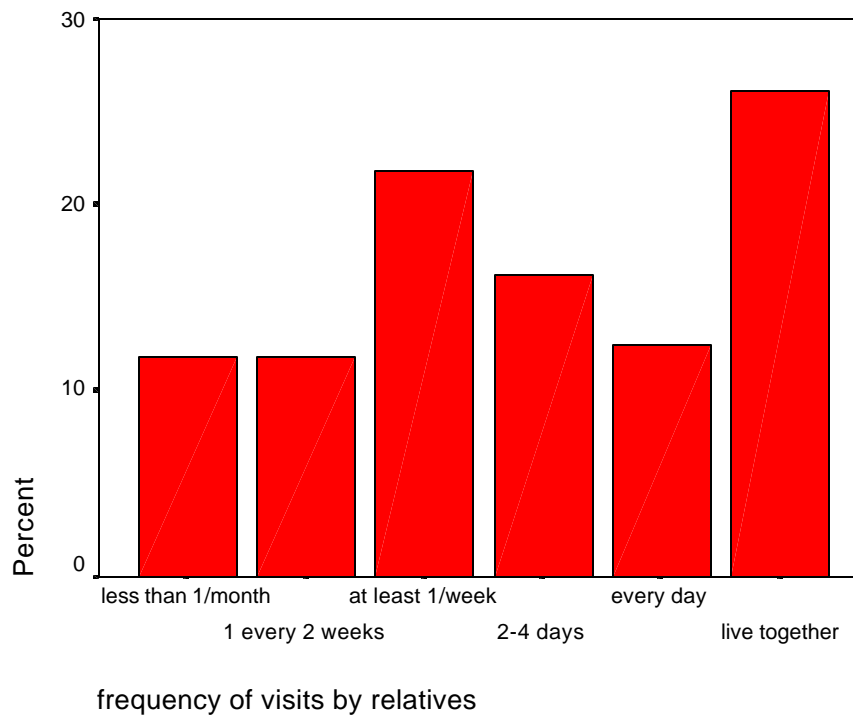
**Figure 19: Percentage of Respondents Who Need Help with ADL and IADL**



## ***Social Contact***

Research has shown that elders who have close contact with relatives and friends enjoy better health and well being<sup>7</sup>. Frequency of contact with relatives and friends is an important measure of social support. Most respondents maintain frequent contact with their children, close relatives, and friends. The following figure shows the frequency with which respondents maintain contact.

Figure 20. Social Contact with Close Relatives



## ***Depression and Emotional Problems***

Previous research has found that immigrants, particularly elders, experience significant psychological and emotional problems because of their language barriers, financial hardships, social isolation, and adjustment to a new environment. Respondents were tested using 11 items selected from the Center for Epidemiological Studies Depression Scale (CES-D). Figure 21 shows that 19.1% of the respondents scored as depressed. Although this is substantial, this is not as high a level as depression is among the elderly in the general population. This may be because many respondents are not socially isolated. Many live in elderly housing, participate in Chinese-run senior center activities regularly and have frequent contact with relatives.

<sup>7</sup> Boulton, C., Kane, R., Louis, T., Boulton, L., and McCaffrey, D. 1994. Chronic Conditions that lead to functional limitations in the elderly. *Journals of Gerontology* 49(1): M28-36.

Figure 21: Depression Tested with CES-D Scale

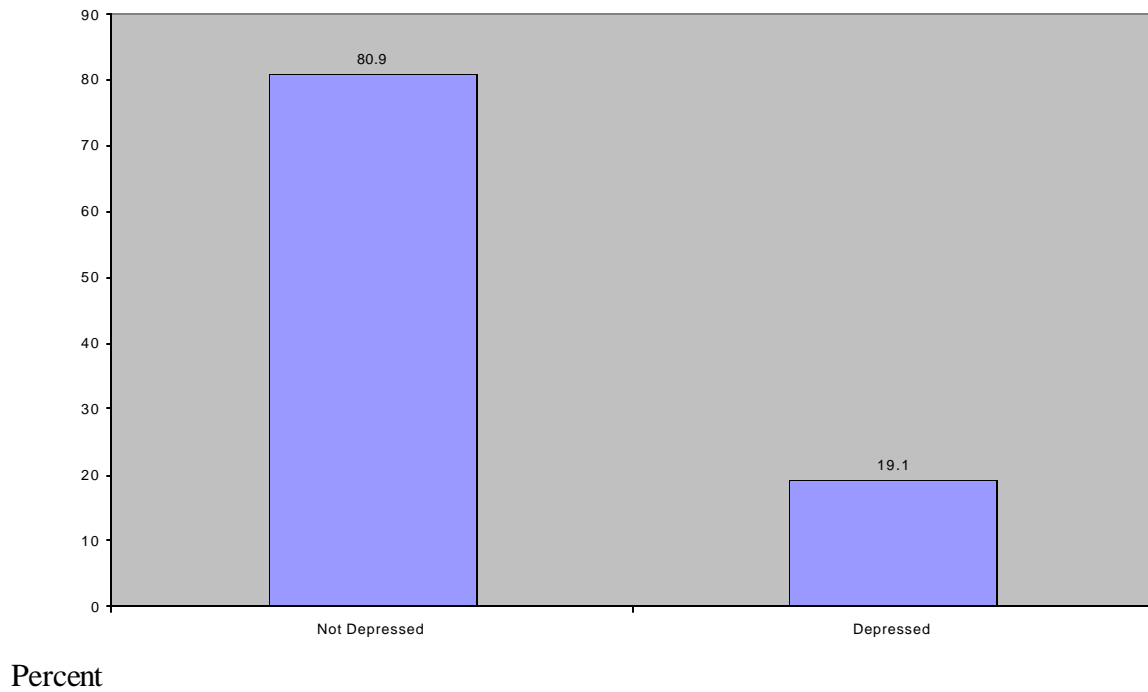
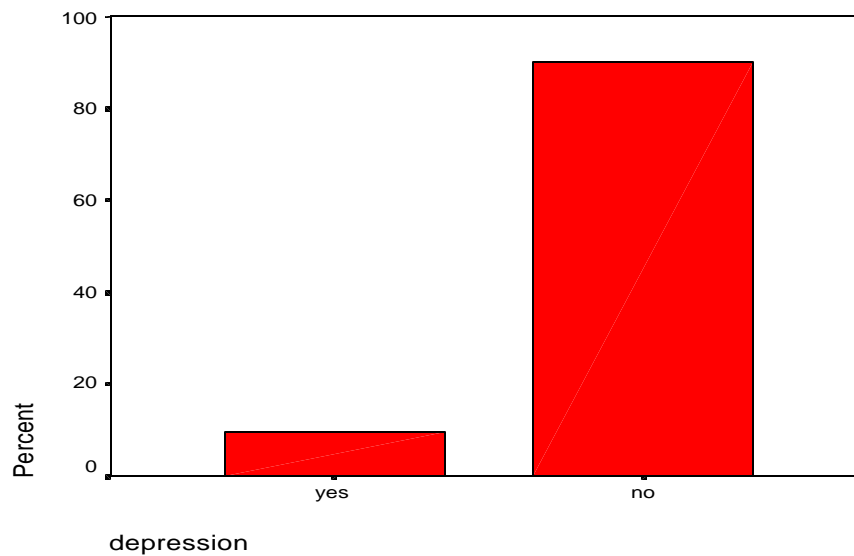


Figure 22 illustrates the percentage of the respondents that have limited their activities because of their depression or emotional problems.

Figure 22: Depression Limits the Respondents' Activities

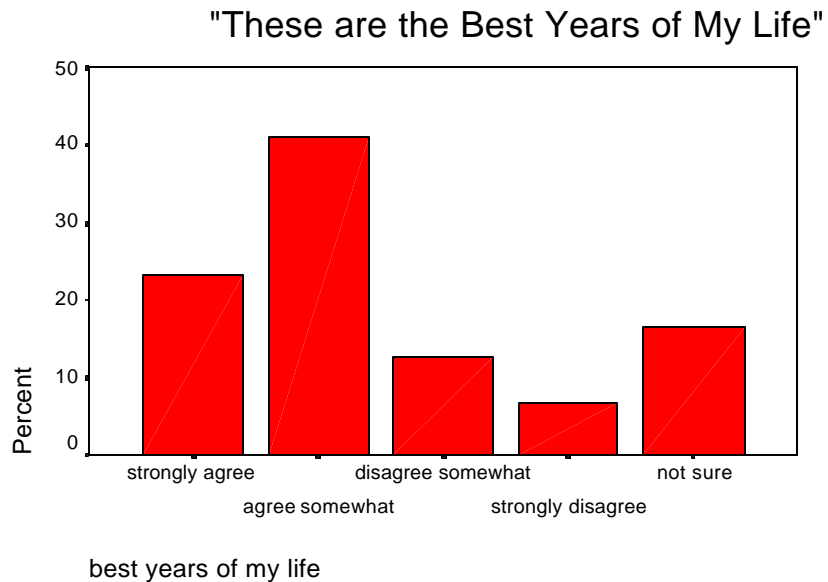


### *Quality of Life Measures*

Quality of life measures were assessed by asking respondents how much they agree with the following three statements: a) my life could be happier than it is now; b) these are the best years of my life; and c) as I look back on my life I am fairly well satisfied.

Nineteen percent (19%) of the respondents strongly agreed with statement (a), and 44% agreed somewhat with this statement. However, it is interesting to note that the majority of respondents also agreed with statement (b). In addition, seventy-four percent (74%) strongly agreed, or agreed somewhat with statement (c).

Figure 23. Quality of Life Measures --



## Patterns of Health Care Utilization

This section provides information on health care utilization, including use of home care, and health care services. It also presents findings on choice of health care setting, use of alternative medicine, use of a primary care doctor and a traditional Chinese doctor, and overall satisfaction with health care in the United States.

### *Health Care Utilization*

Health care utilization was measured by the frequency of visits to both primary care doctors and specialists. The results showed:

- ? ? 38% had a scheduled visit to a health care provider within the last month;
- ? ? 25% had within the last 3 months;
- ? ? 22% had within the last 6 months;
- ? ? 10% had within the past year; and
- ? ? 5% had 1 year or more than 1 year ago.

The list below shows the percentage of respondents who visited various specialists in the last twelve months. Mental health services are largely underutilized among Chinese respondents. None of the respondents admitted to seeing a psychiatrist. This may be largely due to the stigma attached to having mental health problems in the Chinese immigrant community. Additionally, the techniques used by American psychiatrists may not always be appreciated or even understood by the Chinese respondents. This finding highlights the need to study mental health issues among the Chinese elder immigrants.

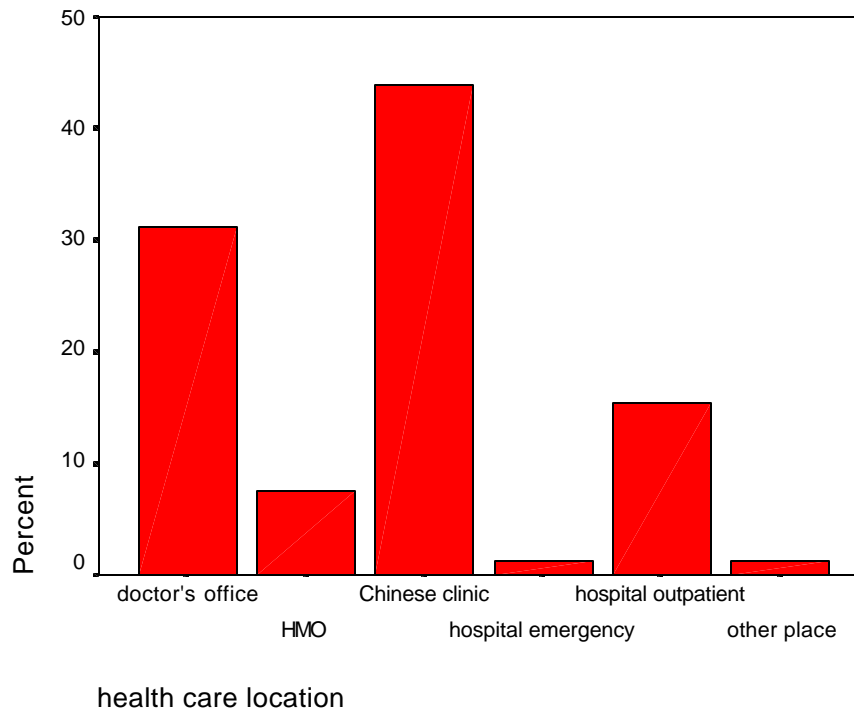
- ? ? 71% visited family doctor
- ? ? 47% visited dentist
- ? ? 42% visited internal medicine specialist
- ? ? 41% visited eye doctor
- ? ? 16% visited gynecologist
- ? ? 11% visited cardiologist
- ? ? 10% visited gastroenterologist
- ? ? 10% visited other specialist
- ? ? 2% visited allergist
- ? ? 0.6% visited neurologist
- ? ? 0% visited psychiatrist

### ***Health Care Setting***

Chinese elder immigrants have many choices in selecting a health care setting. Increasingly, health care providers offer translation services for the Chinese immigrant population. Hospitals such as New England Medical Center, St. Elizabeth's, Brigham and Women's and Beth Israel Deaconess all offer extensive translation services. South Shore Community Health Center has clinics in Chinatown and Quincy, the areas with highly concentrated Chinese elder populations. The majority of the health care providers at these clinics are Chinese-speaking. In addition, a growing number of Chinese-speaking physicians have opened their own clinics in the Greater Boston area.

The chart below illustrates the diversity of health care settings that are used by the respondents.

**Figure 24: Health Care Setting**



### ***Primary Care Doctors***

The vast majority of the respondents (86%) have a primary care doctor, and most of them have been going to that primary care doctor for more than one year. Ninety-five percent of the respondents reported that they were very satisfied or somewhat satisfied with their primary care doctor. Only ten percent of the respondents have ever changed their doctor because they were dissatisfied.

The common concerns that respondents had with their primary care doctors were:

? ? Have to wait too long	29%
? ? Does not speak Chinese	24%
? ? Interpreter not available	22%
? ? Need to travel too far	13%
? ? Too hard to get an appointment	13%
? ? Does not spend enough time	12%
? ? Too many medical tests	11%
? ? Did not explain well	11%
? ? Current poor location	9%
? ? Could not diagnose problem	7%
? ? Does not listen to me	6%

### ***Availability of Chinese-Speaking Providers***

As mentioned earlier, the vast majority of the respondents in the study have limited knowledge of English. Therefore, availability of Chinese-speaking providers becomes especially important. Sixty-one percent (61%) of the respondents reported that it was extremely important for them to receive care from a Chinese-speaking provider; thirty percent (30%) of them reported it was very important; seven percent (7%) said it was fairly important; and only two percent (2%) said it was not really important. Of the 86% of the respondents who have a primary care doctor, seventy percent (70%) of them have one who speaks Chinese.

**Figure 25: Importance of Having Chinese-Speaking Providers**

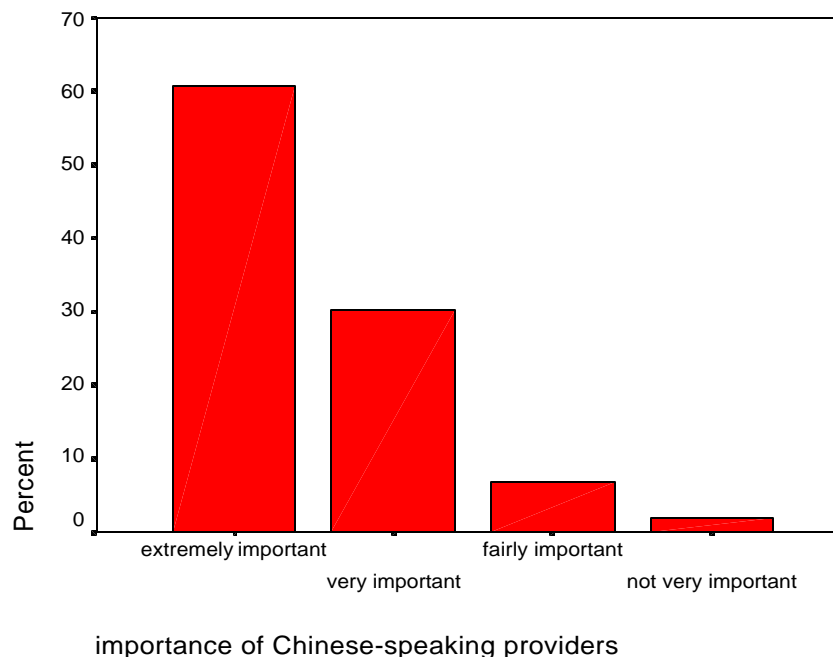
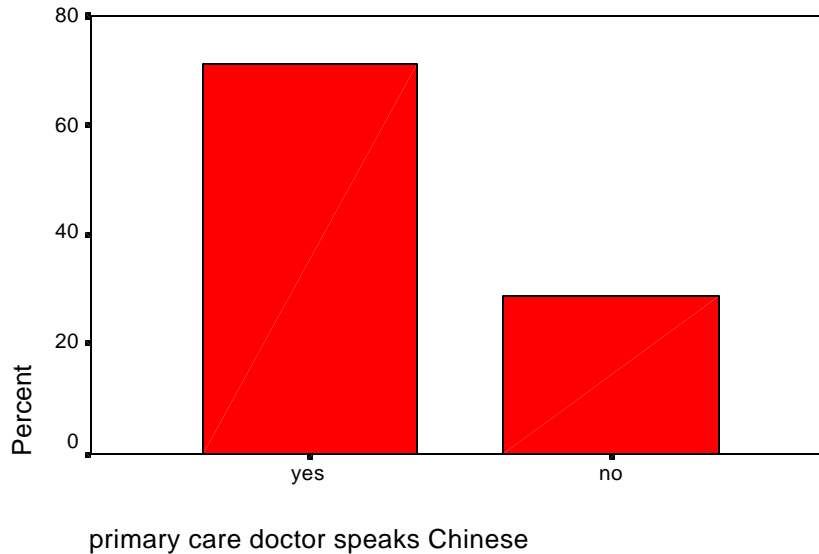




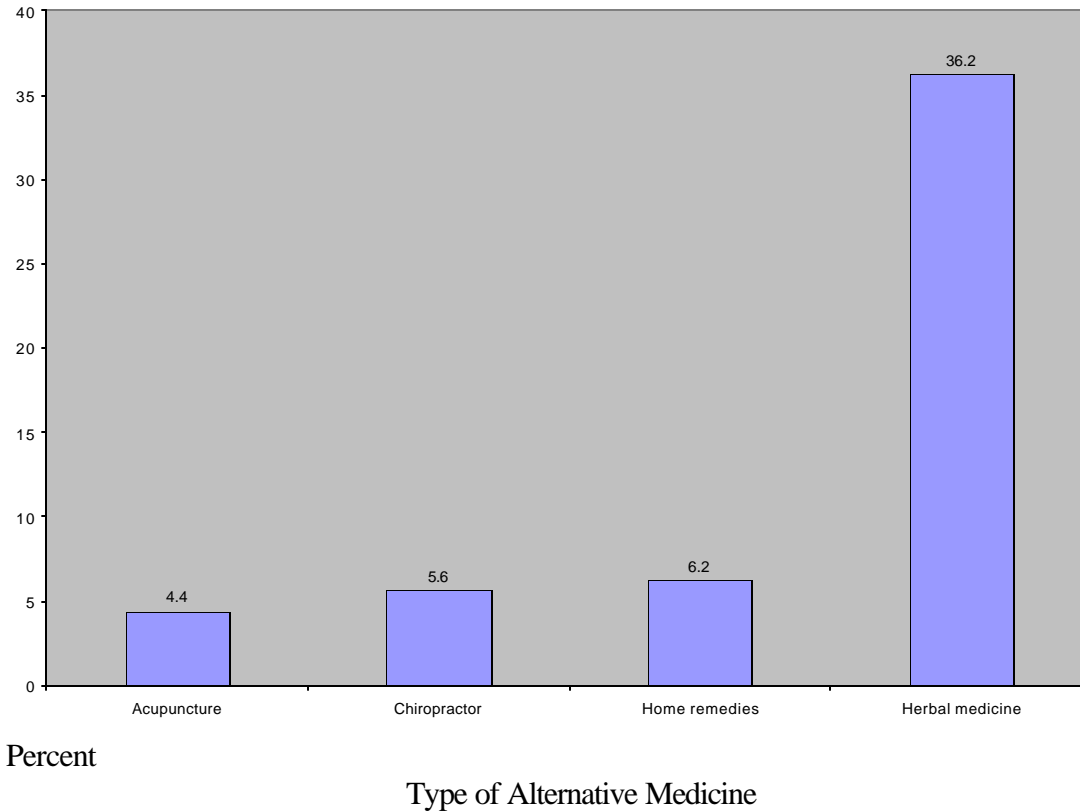
Figure 26. Percentage of the Elderly Having a  
Chinese-Speaking Primary Care Doctor



### ***Use of Alternative Medicine***

Alternative medicine is quite popular among the respondents. During the qualitative interview, almost all the interviewees admitted to having some herbal medicine at home. Not many respondents used acupuncture and chiropractics because Medicare and Medicaid do not cover the cost of these services. Most of the respondents (61%) paid for traditional Chinese medicine treatment by themselves. These herbal medicines are not expensive and can be easily bought at Chinese drug stores in Chinatown. Figure 27 illustrates the percentage of respondents who used alternative medicine in the past 12 months.

**Figure 27: Percentage of Respondents Using Alternative Medicine**



### ***Seeing a Traditional Chinese Doctor***

Traditional Chinese medicine has existed for more than five thousand years. Although it is not covered by insurance, some respondents still prefer to see a traditional Chinese doctor. They may feel that it is more convenient to see a traditional Chinese doctor than a Western doctor. Among those who responded to this question:

- ? ? 44% responded that they never go to see a traditional Chinese doctor;
- ? ? 24% answered that they would feel more comfortable seeing a traditional Chinese doctor when they have some minor problems;
- ? ? 10% reported that they would see a traditional Chinese doctor when they hurt their back or neck;
- ? ? 5% reported that they have more than one chronic disease; and
- ? ? 9% answered that they go to see a traditional Chinese doctor for all their health problems.

### *Home Care Services Used*

There are several Chinese home care services existing in the Greater Boston Chinese community. In addition, more and more home care agencies have recruited Chinese-speaking social workers. However, not many respondents use home care services.

Figure 28: Percentage of Respondents Using Home Care Services

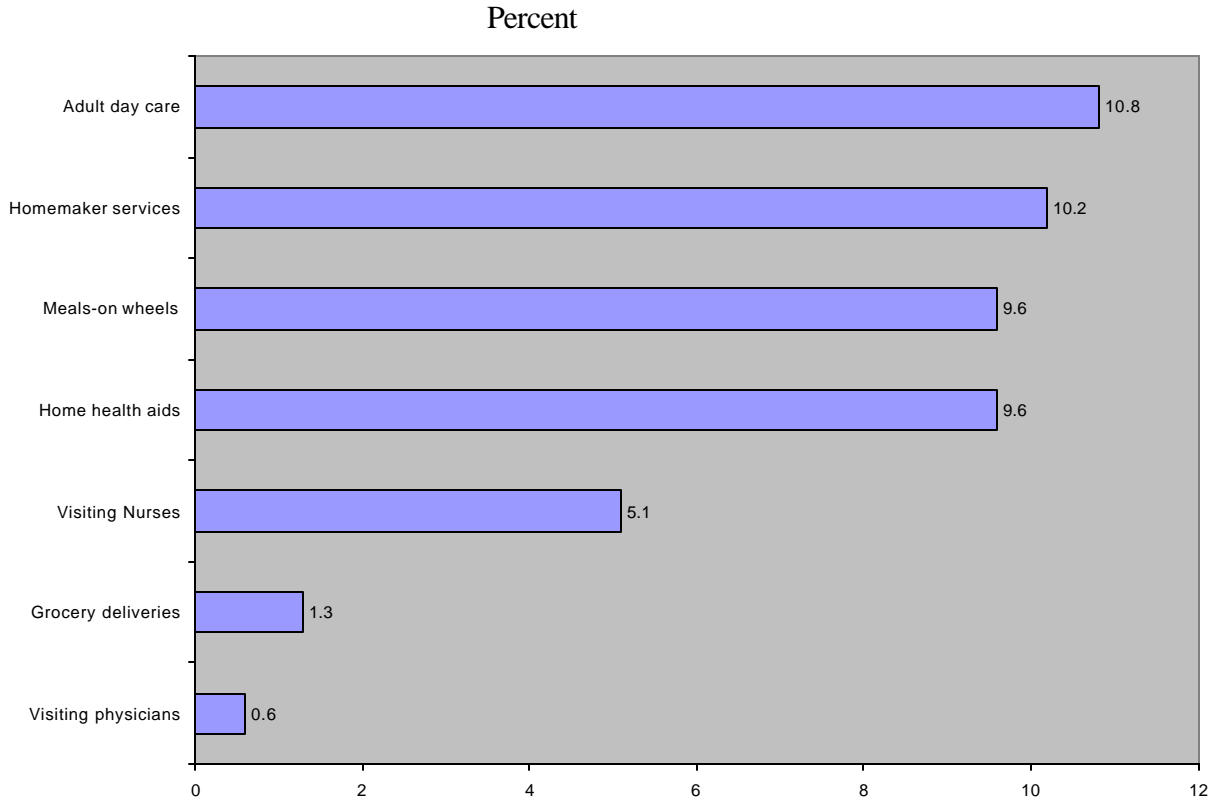


Figure 29 illustrates the percentage of respondents receiving health care services other than home care services.

**FIGURE 29: Health Care Service Utilization**  
Percent

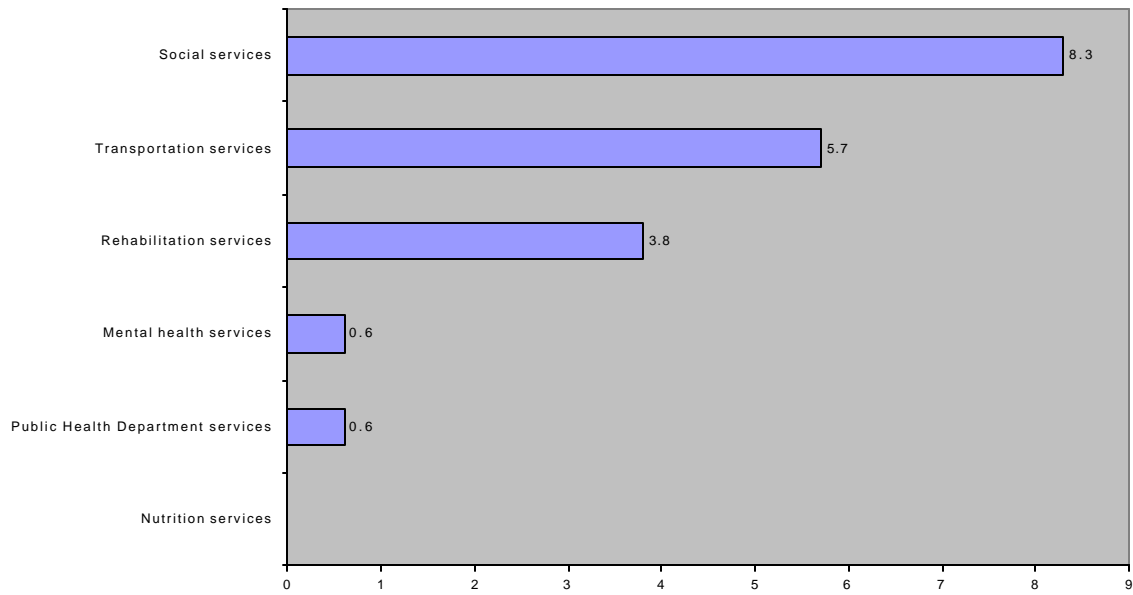
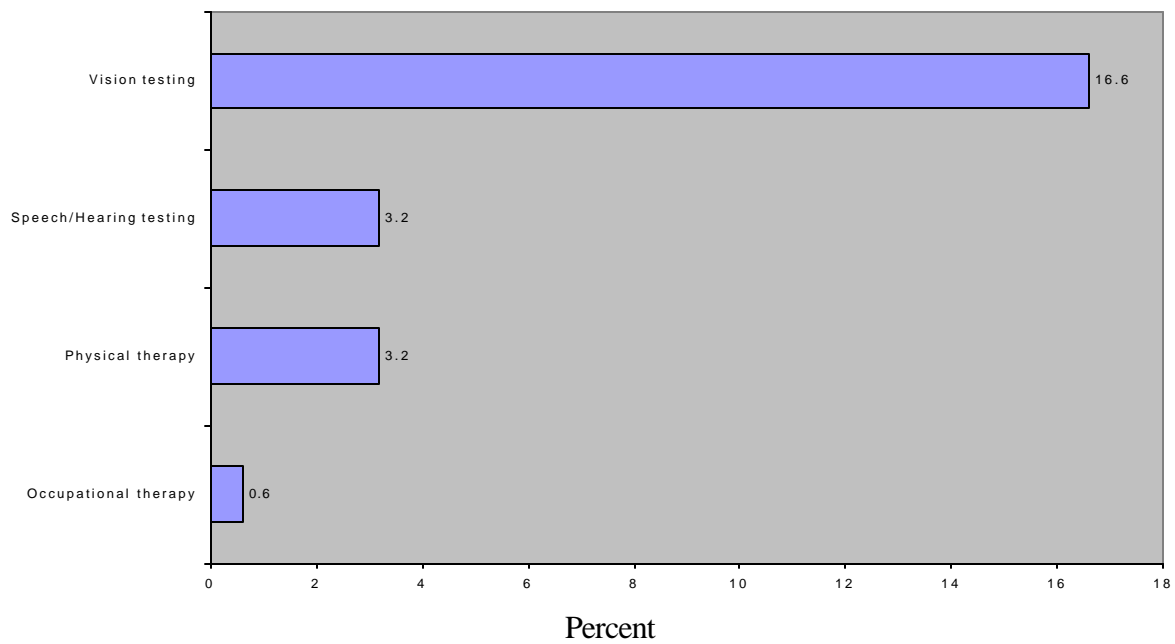


Figure 30 below shows various health services utilized by respondents.

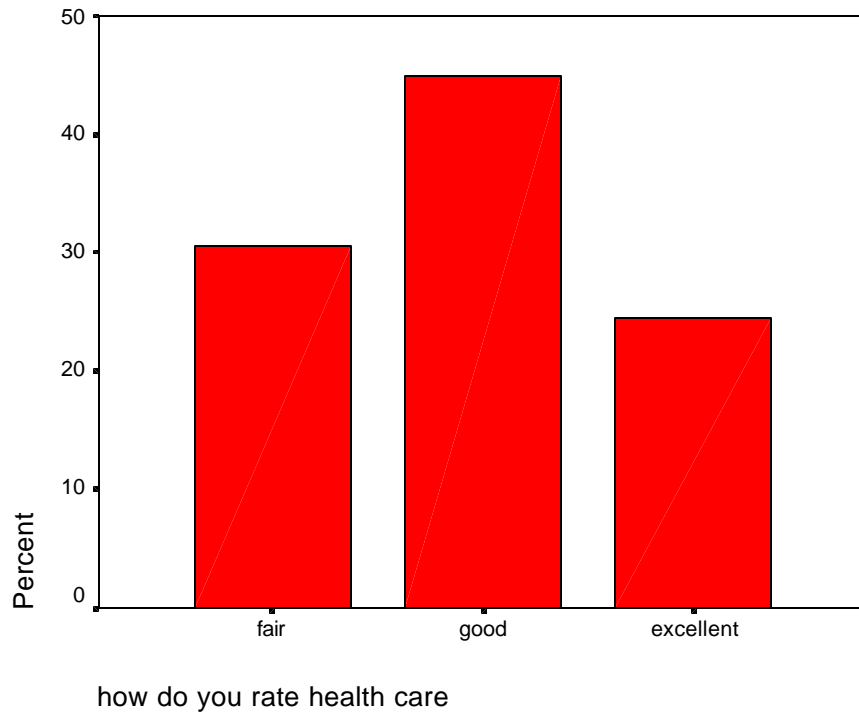
**Figure 30: Health Service Utilization**



### *Overall Satisfaction with Health Care in the United States*

Most of the respondents (69%) rated overall health care in the U.S. as good or very good.

Figure 31: Overall Satisfaction with Health Care in the U.S.



## Health Behavior

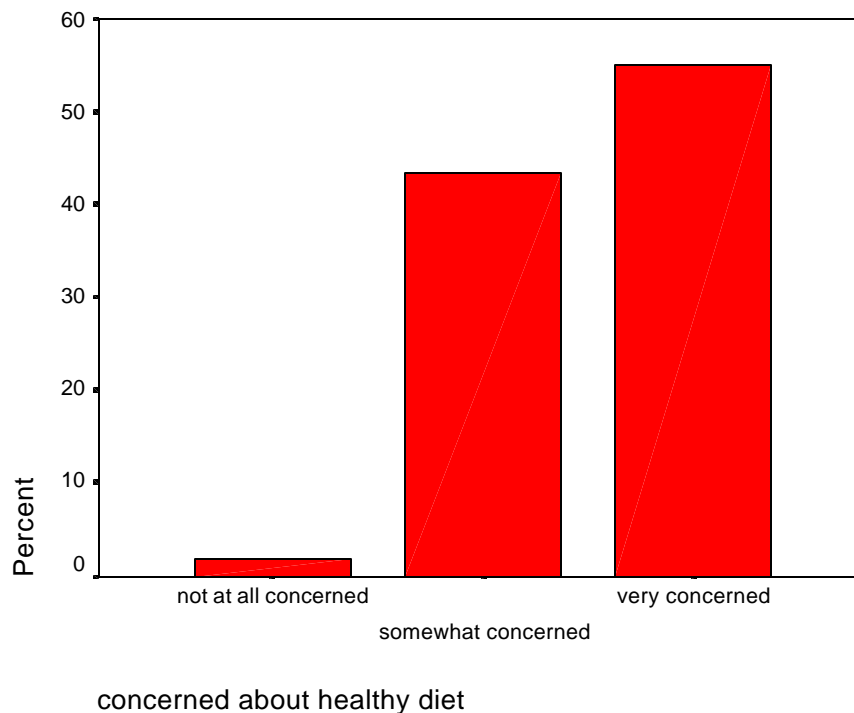
This section provides survey results on respondents' eating habits, prevalence of smoking and drinking, use of medications, use of assistive devices, popular types of physical activities, and time spent on these activities.

### *Eating Habits*

Traditional Chinese cuisine is rich in vegetables, bean curd, and carbohydrates, and is relatively low in sweets and meats. More than half of the respondents reported that they were very concerned about eating a healthy diet and forty-three percent said that they were somewhat concerned about a healthy diet. Very few people (1%) reported that they were not concerned at all. The data indicate that most respondents define a healthy diet as one that contains many vegetables and fruits daily.

Many foods produced in China do not contain nutritional information on food labels. The majority of the respondents are not used to reading food labels and buy the food that they are familiar with. The vast majority of the respondents do not take supplemental nutrition products.

Figure 32: Concern about Healthy Diet

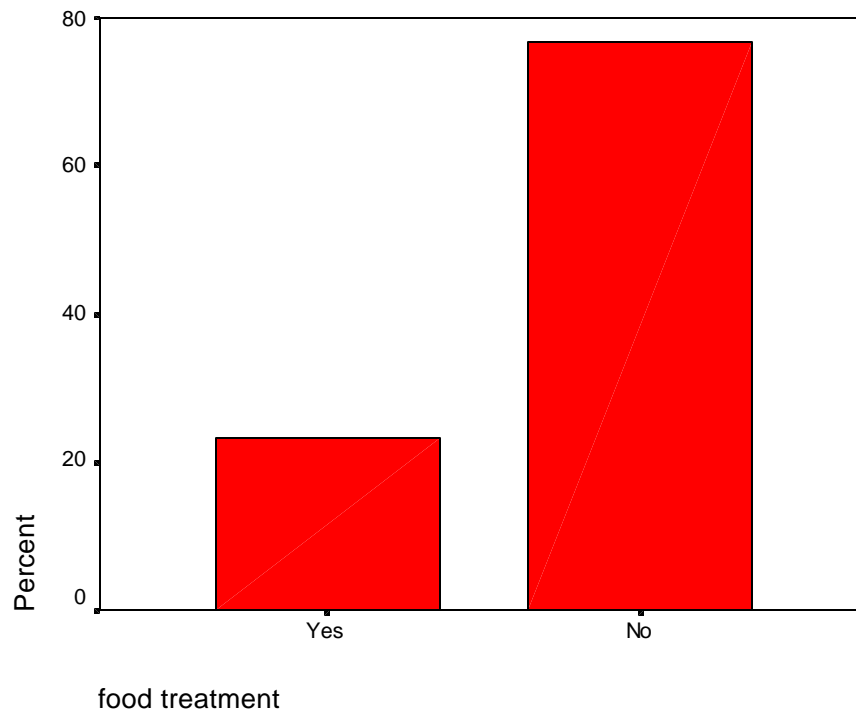


### ***Food as Medical Treatment***

Using food as medical treatment is an important part of Chinese Traditional Medicine. Twenty-eight percent of the respondents used food for medical treatment. This was discussed in the qualitative interviews.

One person explained how he used food to treat his medical conditions during the qualitative interview: “I have arthritis.... Some of my friends exchange treatments with each other. Usually we will talk about what kind of soup we should have with Chinese natural herbal ingredients. For example, we will put pork bones with Chun Kun, and Bak Zhi [Chinese herbs]”.

Figure 33: Food as Medical Treatment

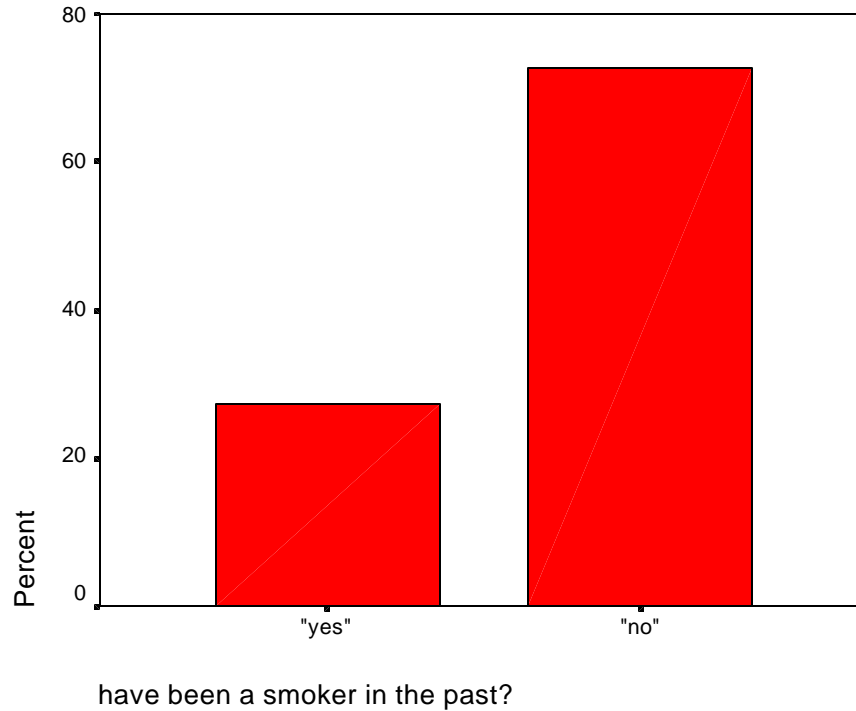


### ***Prevalence of Smoking and Tobacco Control***

Only 6% of the respondents reported that they currently smoke. Twenty-seven percent of the respondents reported that they smoked in the past. The majority of them quit smoking because of their health problems. Of those who quit smoking, 61% did so ten or more years ago, 17% quit six to ten years ago, 15% quit one to five years ago, and 7% quit in the past year. Among those who smoke, the number of cigarettes they smoke

varied from 2 to 20 per day, with an average of 8.6 per day. Forty-four (44%) percent of them reported smoking 10 cigarettes per day.

Figure 34: Percentage of Respondents Who Used to Smoke

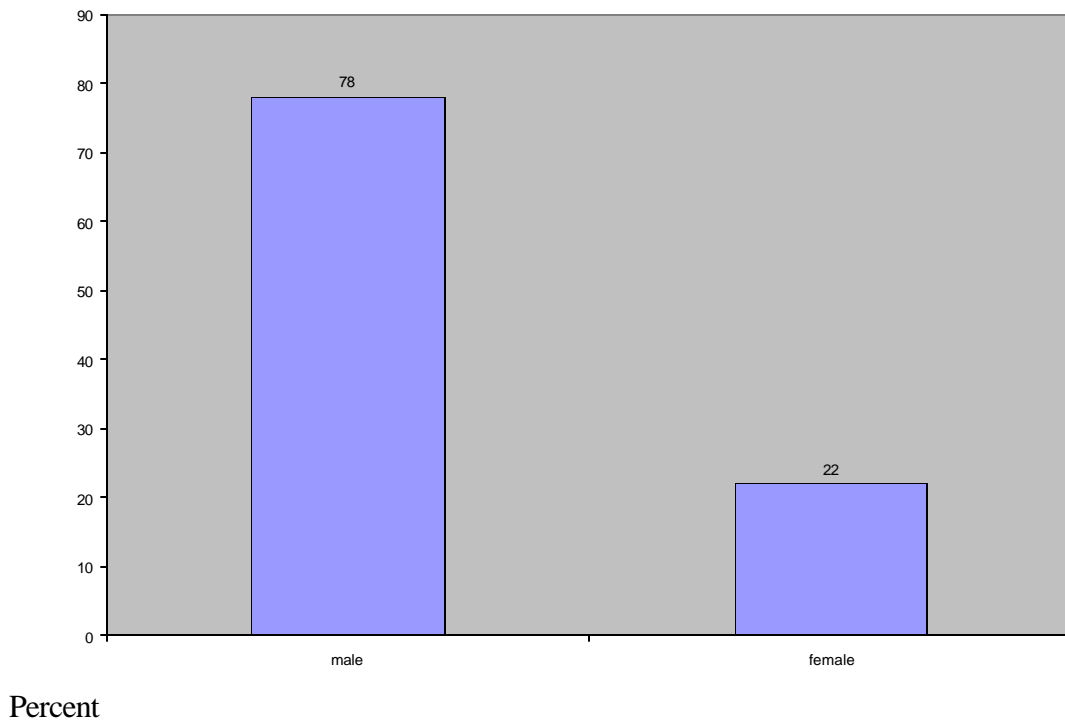


#### ***Gender Distribution among Smokers***

Smoking is more prevalent among men in the survey. Seventy-eight percent of the current smokers were men. Ninety percent (90%) of past smokers were men.



Figure 35: Gender Distribution Among Smokers



### ***Alcohol Use***

Drinking alcohol is fairly popular in the northern part of China. However, drinking alcohol is not very common among the respondents. Only 8% of the respondents drink alcohol on a regular basis (2-3 times a week or more). Among them:

- ? ? 68% drink alcohol less than 3 times a week;
- ? ? 9% drink more than 3 times a week; and
- ? ? 23% drink daily.

### ***Physical Activity***

Physical activity is very popular among the respondents. Eighty-one percent (81%) of the respondents reported doing exercise regularly (2-3 times a week or more). Walking and Tai Chi or other types of Chinese exercise, are the most popular types of exercise for Chinese respondents. Very few respondents swim, jog or participate in exercise classes.

Specifically:

- ? ? 76% of the Chinese-speaking elder immigrants take a walk on a regular basis;
- ? ? 55% do Tai Chi or other types of Chinese exercise;
- ? ? 14% jog ;
- ? ? 8% meditate;
- ? ? 2% take exercise class or join exercise group; and
- ? ? 1% swim.

(Note: some respondents chose 2 or more types of exercise)

### ***Walking- A Popular Type of Exercise***

Walking is a very popular type of exercise among the respondents. Most of the respondents did not have many other hobbies and leisure activities. Most did not drive and had a significant amount of walking to do for shopping and doctor visits. Sixty-seven percent (67%) of the respondents reported walking at least 10 minutes every day or almost every day, and sixteen percent (16%) reported walking 2 or 3 times a week. Most spent 15 minutes to one hour walking outside on a typical day.

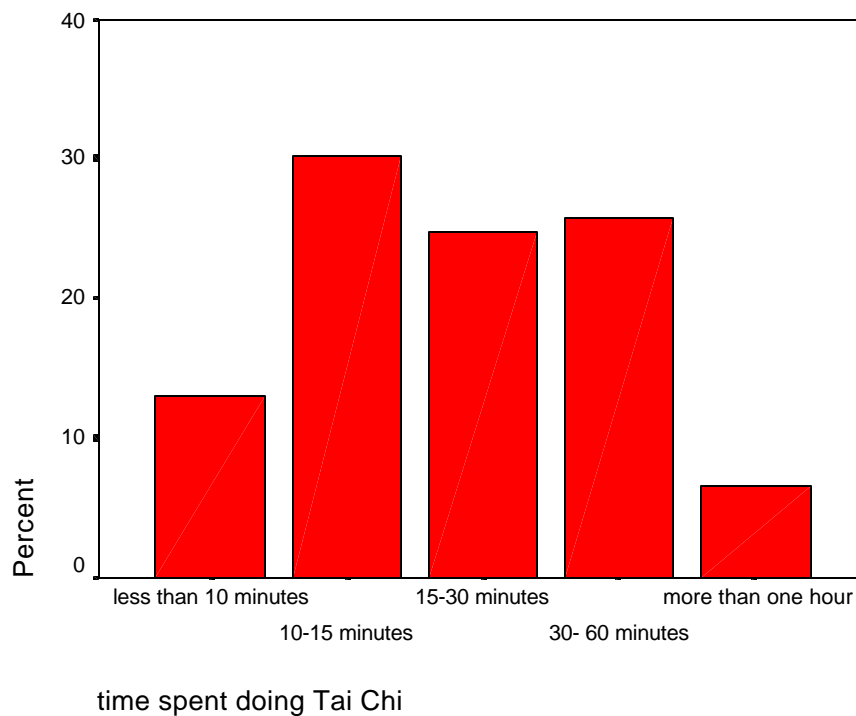
### ***Tai Chi –Another Popular Type of Exercise***

Tai Chi, a Chinese traditional type of exercise, is also popular among the respondents. Fifty-five percent (55%) of the respondents reported doing Tai Chi or other types of Chinese exercise. Among them:

- ? ? 28% did Tai Chi every day;
- ? ? 25% did Tai Chi almost every day;
- ? ? 27% did Tai Chi 2 or 3 days a week; and
- ? ? 20% did Tai Chi less than once a week.

Figure 36 shows how much time Chinese respondents usually spend doing Tai Chi.

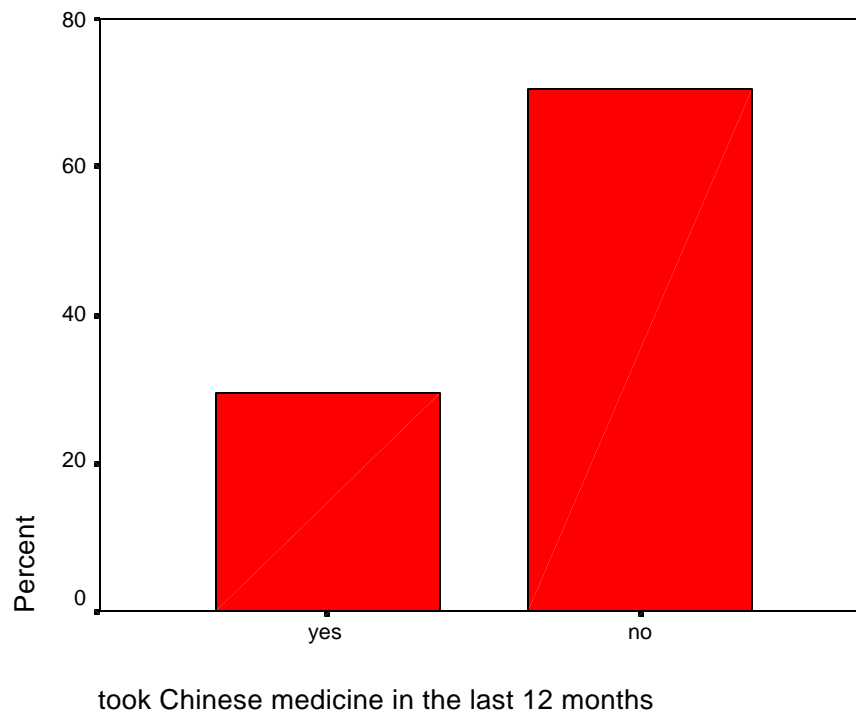
**Figure 36: Time Spent Doing Tai Chi**



### *Use of Medications*

Twenty-eight percent (28%) of the respondents did not take prescription medications at all in the last 12 months; forty-three percent (43%) took 1 or 2 medications; and twenty-nine percent (29%) took 3 or more medications. Twenty-nine percent (29%) of the respondents took Chinese medications during the last 12 months. Most bought Chinese medications in Chinese drug stores. Other respondents got the medications from friends or relatives in China, Taiwan, or Hong Kong, or brought a supply from their homeland.

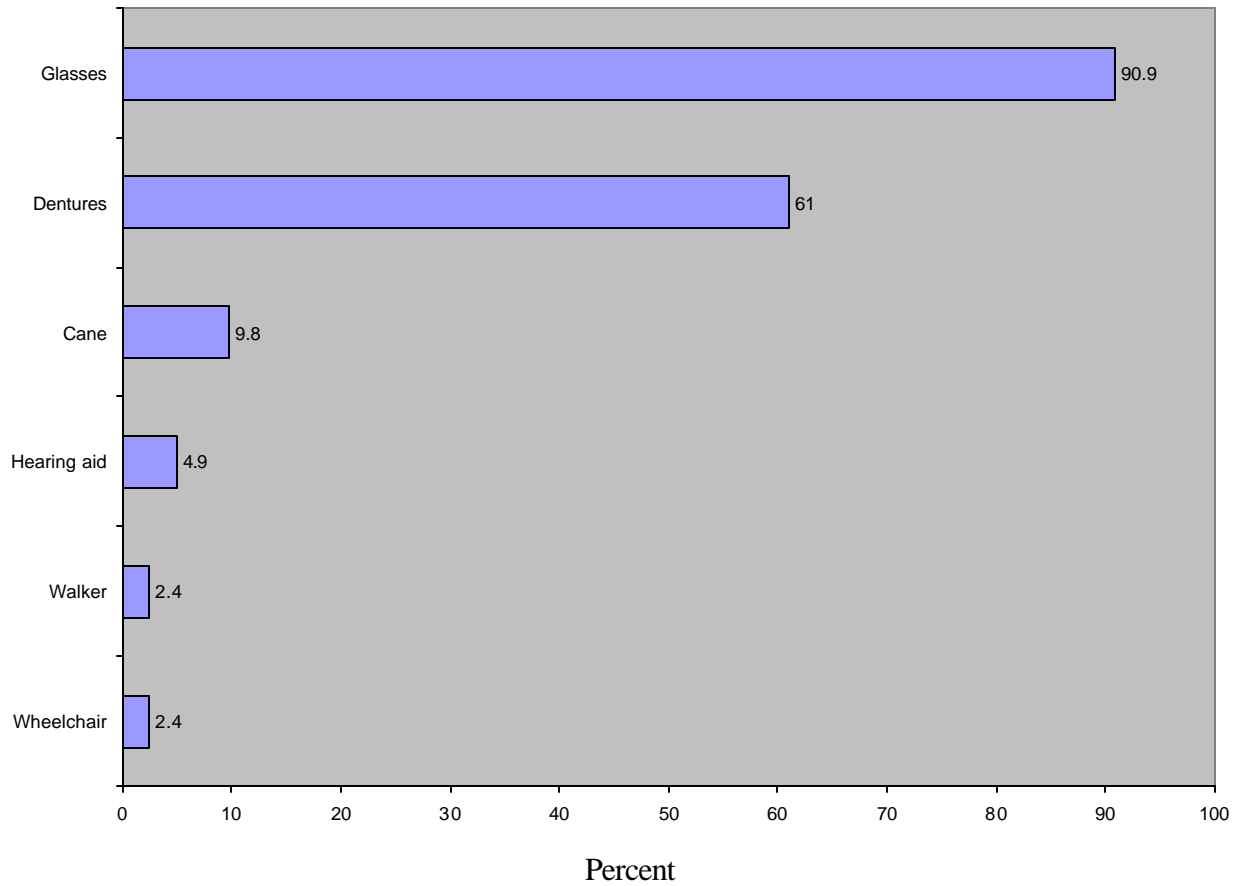
Figure 37: Took Chinese Medicine  
in the past 12 Months



### *Assistive Devices and Medical Equipment*

The vast majority of the Chinese-speaking respondents (91%) reported using glasses. Only 2% of the respondents used wheelchairs and walkers. This reveals that most of the respondents in the study were functionally independent. Figure 38 shows the percentage of the respondents that used assistive devices and medical equipment.

Figure 38: Use of Assistive Devices and Medical Equipment

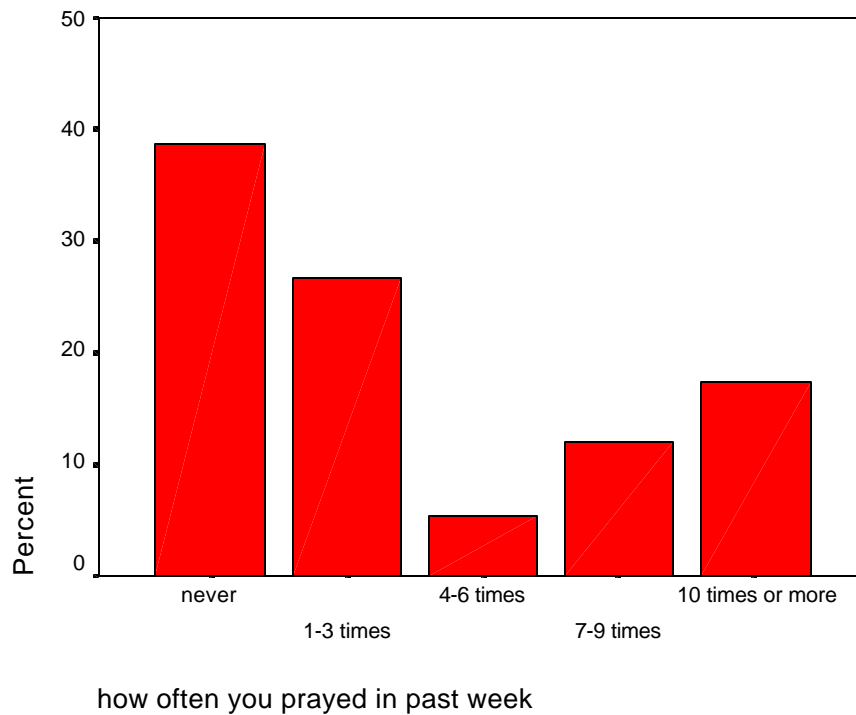


## Life Satisfaction and Spiritual Involvement

### *Religious Beliefs*

Forty-one percent (41%) of the respondents claimed to be religious. Among these, 56% were Christian and 29% were Buddhists. When asked how many times they prayed during the last week, 29% answered that they prayed seven times or more. The two main reasons given for prayer were for good health and peace.

Figure 39: How Often You Pray



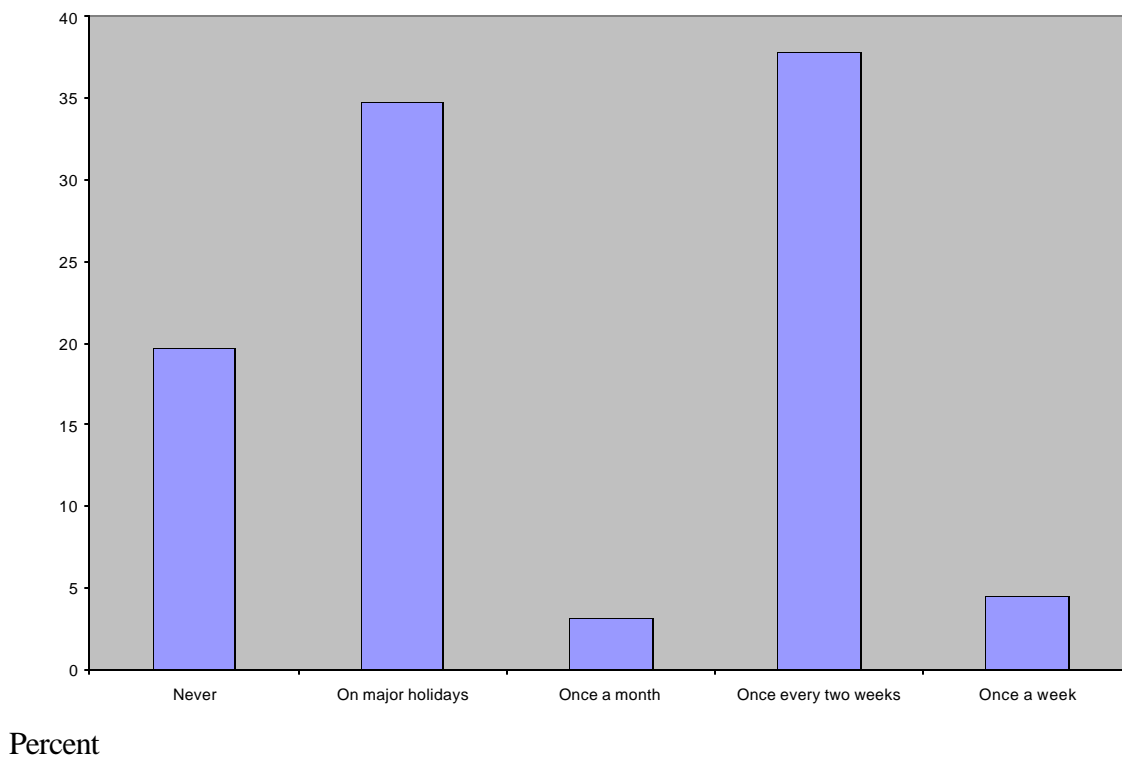
Among the respondents who are religious:

- ? ? 4.5% go to church or temple every week;
- ? ? 37.9% go to church or temple every two weeks;
- ? ? 3.1% go to church or temple once a month;
- ? ? 34.8% go to church or temple on major holidays; and
- ? ? 19.7% never go to church or temple.

Discussions during our qualitative interviews revealed that some respondents, especially Buddhists, have a shrine at home where they conduct their religious ceremonies and prayers and do not go to temple.

The chart below illustrates the frequency that respondents go to church or temple.

Figure 40: Frequency of Going to Church or Temple



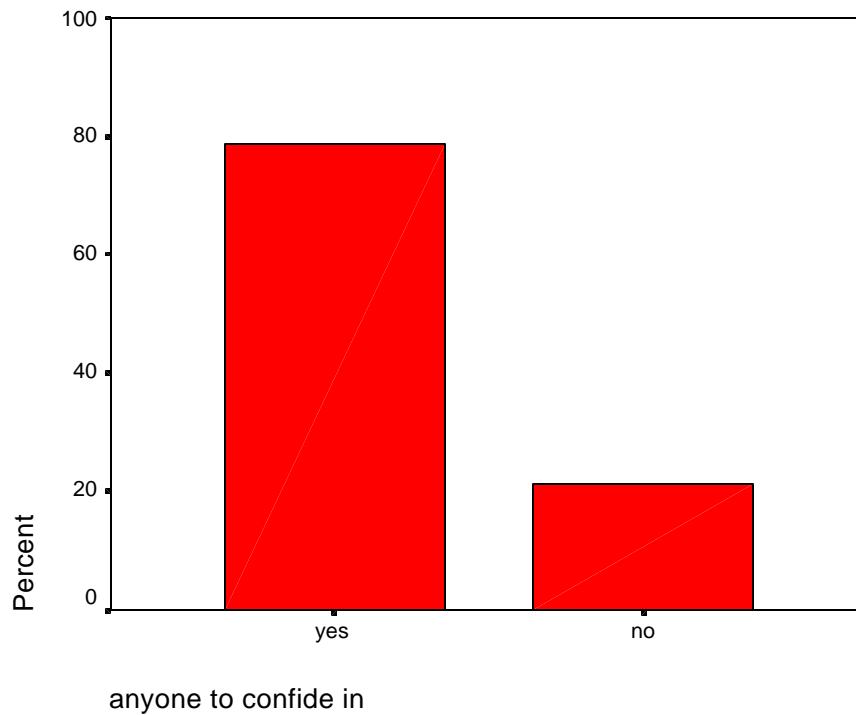
### *Someone in whom to Confide*

Having someone in whom to confide can relieve loneliness and depression in the respondents. This indicator is especially important for immigrants because of their higher stress levels. Seventy-nine percent (79%) have someone to confide in. Of these:

- ? ? 95% reported that they can confide in their spouse;
- ? ? 67% reported that they can confide in their children;
- ? ? 16% said they can confide in their relatives; and
- ? ? 30% said they can confide in friends.

(Note: The respondents can have multiple choices)

Figure 41: Having Someone to Confide in

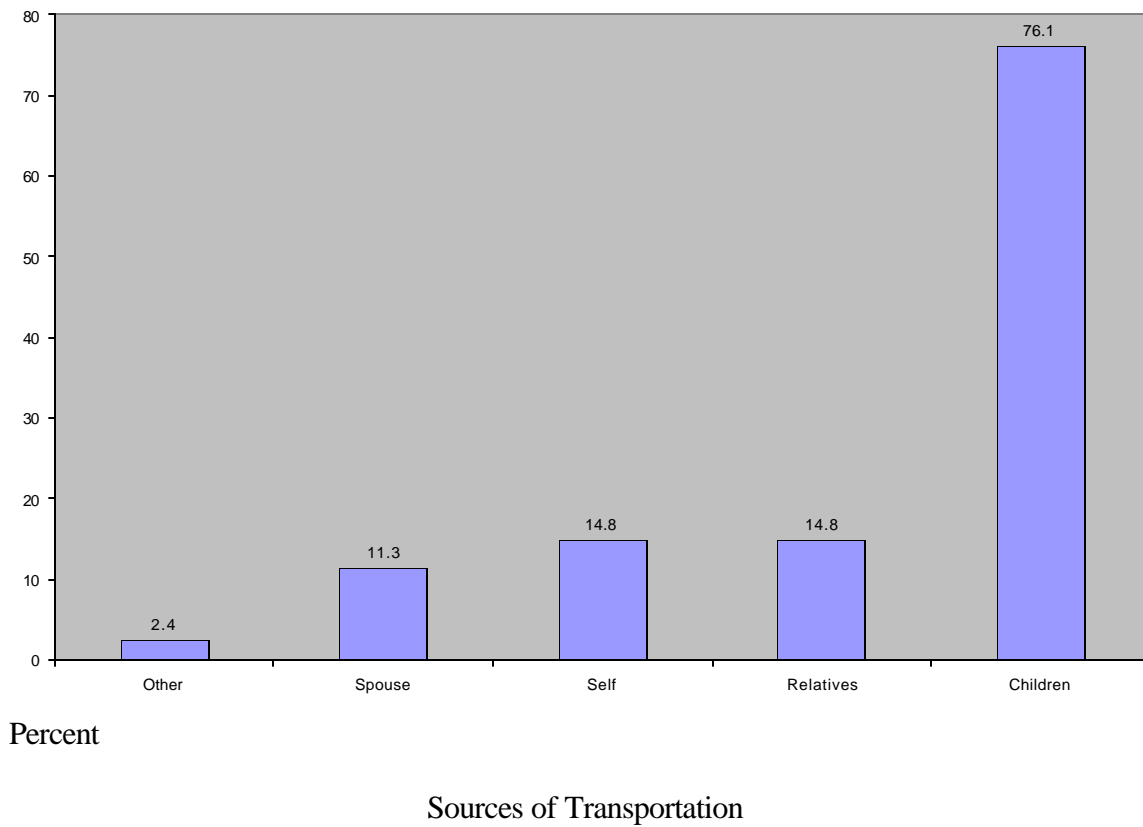




### ***Someone to Provide Transportation***

The vast majority of the respondents do not seem to feel limited by their inability to drive. Eighty-four percent (84%) of the respondents reported that they feel free to go anywhere they want. Seventy-six percent (76%) of them answered that their children provided transportation for them.

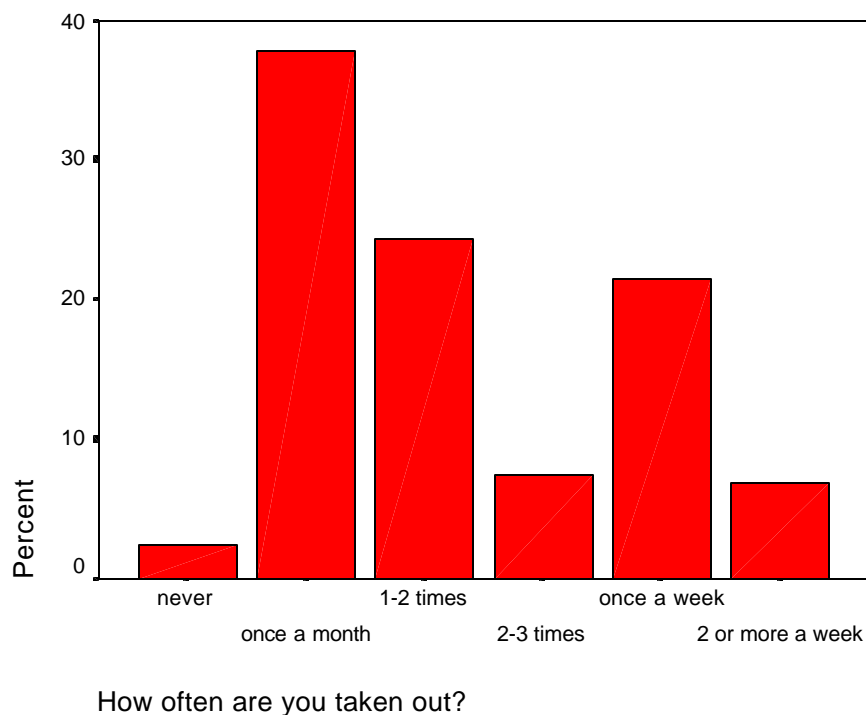
**Figure 42: Percentage of Respondents Receiving Transportation Services from Various Sources**



### ***Taken Out by Family Members***

The majority of the respondents have close contact with their family members. Most of the respondents reported that their family members took them out for dinner, dim sum, shopping, or helped with errands at least 1 to 2 times a month. Very few (2.4%) respondents reported that their family members never took them out or helped with errands.

Figure 43: Taken Out by Family Members



### ***Feeling Respected in the Family***

The vast majority of the respondents feel respected in the family. Sixty-one percent (61%) answered they were treated respectfully “quite a bit”, and 13% felt they were treated “extremely” respectfully. Very few respondents (0.6%) reported that they were not respected at all in their family. Only 7.5% of the respondents felt their family neglected them. This may be an underestimation of neglect because some respondents may feel that reporting this will bring shame to their family.

Figure 44: Treated Respectfully in the Family

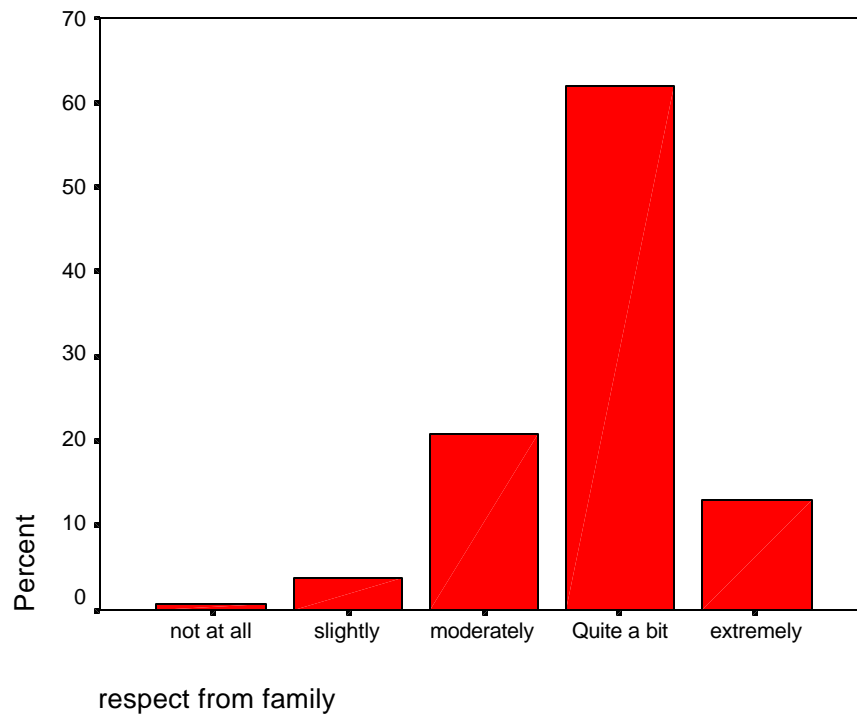
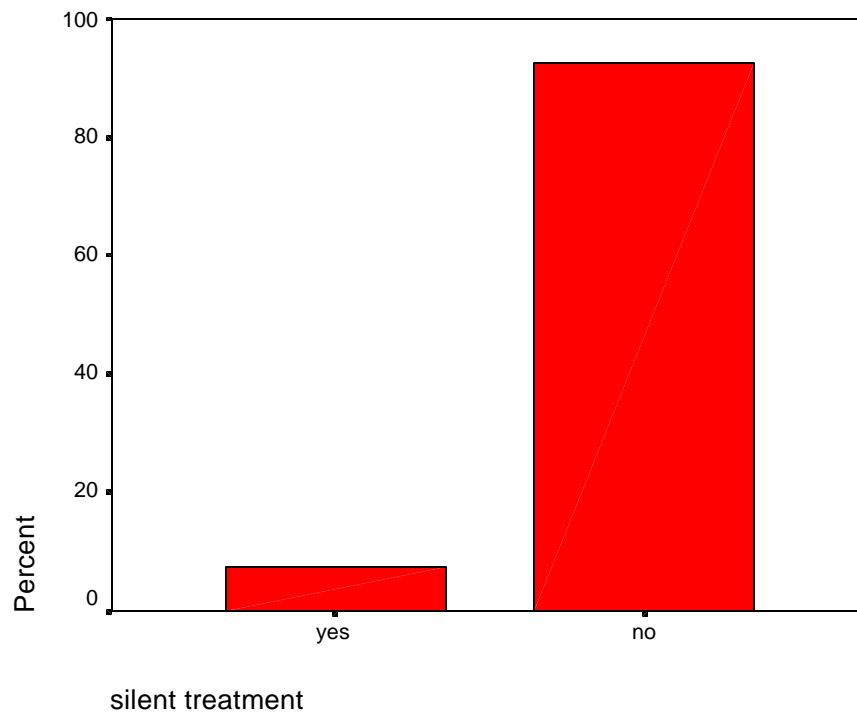


Figure 45: Neglected by the Family



### ***Met Health Care Needs***

The majority of the respondents (71%) thought that their health care needs were met adequately, and 20% thought their needs had been met more than adequately. Only 9% of the respondents said their needs were not met adequately.

Figure 46: Health Care Needs Met

